28

THE PREVALENCE AND DETECTION OF POSSIBLE MINOR PSYCHIATRIC MORBIDITY IN STUDENTS ATTENDING THE STUDENT HEALTH SERVICES AT THE UNIVERSITY OF CAPE TOWN - A PILOT STUDY

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ABSTRACT

This study reports upon the point prevalence of possible minor psychiatric morbidity in students attending the Student Health Service at the University of Cape Town. It also establishes the prevalence of exposure to trauma, Posttraumatic Stress Disorder and substance abuse (alcohol and drugs) and assesses adjustment to university as well as financial and academic coping. Relationships amongst variables of interest are examined. The study establishes, also, a detection rate of minor psychiatric morbidity by medical personnel. The findings of this study are related to mental health services for students at the University of Cape Town as a whole.

Using a cross-sectional design, a questionnaire containing the Self-Reporting Questionnaire (SRQ-25) was administered to students attending the general health services of the Student Health Service over a 3 week period (N=515). Since this is a pilot study, no second stage criterion was administered. Clinical staff (nurses and doctors) attending to the student sample were asked to complete a brief questionnaire. Data was analysed using descriptive statistics and chi-square analysis.

The prevalence of minor psychiatric morbidity was estimated at 29% (95% CI of 24.8%-32.7%). Minor psychiatric morbidity was found to be significantly related to a subjective sense of not feeling adjusted to university ($p < .000004$). Fifty-two percent (95% CI of 47.9%-55.8%) of students reported exposure to traumatic events and 10% (95% CI of 7.7% to 12.9%) of the total sample were classified as currently manifesting symptoms of Posttraumatic Stress Disorder. Posttraumatic Stress Disorder was found to be most strongly associated with sexual assault ($p < .00003$) and a strong association between Posttraumatic Stress Disorder and minor psychiatric morbidity was manifested ($p < .000004$). 9.5% of the sample reported 'binge drinking' (5 or more drinks on one occasion) daily and/or weekly and 5.4% of the sample reported 'problem drinking' (spending most of one's waking time drinking) daily and/or weekly and/or monthly. No relationship between minor psychiatric morbidity and the frequency and extent of alcohol consumption was indicated but 'race' and alcohol consumption were shown to be related ($p<.000004$). Five percent of students reported smoking cannabis daily or weekly and 4% of students reported having used single or multiple 'hard drugs' in the last year. An

association between cannabis consumption and the use of other illicit drugs and 'race' was found ($p<.00003$ and $p<.000004$ respectively). No relationship between substance abuse and minor psychiatric morbidity and/or gender was manifested. A detection rate of minor psychiatric morbidity of 25% was found.

The methodological and substantive implications of this study are discussed and are related particularly to mental health services for students at the University of Cape Town.

LIST OF CONTENTS

PAGES

PAGES

CHAPTER TWO - METHOD

PAGES

PAGES

CHAPTER FOUR - DISCUSSION

LIST OF APPENDICES [i]

[i] *Lists of contents and lists of tables for appendices are, where necessary, listed individually at the start of each appendix.*

PAGES

LIST OF TABLES

PAGES

LIST OF FIGURES

PAGES

LIST OF ABBREVIATIONS USED IN TEXT

CI	Confidence Interval
DF	Degrees of freedom
DSMIII-R	Diagnostic and Statistical Manual of Mental Disorders (Third Edition - Revised) (American Psychiatric Association, 1987)
DSMIV	Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) (American Psychiatric Association, 1994).
EORP	Equal Opportunities Research Project
GHC	General health care
GP	General practitioner
HSR	Health Rating Schedule
MHP	Mental health professional
MPM	Minor psychiatric morbidity
OR	Odds Ratio
PHC	Primary health care
PSE	Present State Examination
PTSD	Posttraumatic Stress Disorder
SCCC	Student Counselling Co-ordinating Committee
SDSD	Student Development and Services Department
SHAWCO	Student Health and Welfare Organization
SHS	Student Health Service
SRQ	Self Reporting Questionnaire
TG	Tamara Gelman
UCT	University of Cape Town
χ^2	Chi-square
ϕ	Phi
ϕ_c	Cramer's V

LIST OF ABBREVIATIONS USED IN TABLES

SRQ total <8	score of less than 8 on SRQ
SRQ total ≥8	score of equal to or more than 8 on SRQ
8≤SRQ total <15	score of equal to or more than 8 and less than 15 on the SRQ
SRQ total ≥15	score of 15 or more on the SRQ
B	Black
C/I	Coloured/Indian
W	White
F	Female
M	Male

NOTE ON RACIAL CLASSIFICATIONS

This study utilizes racial classifications in a way that, given South Africa's apartheid history, may be found offensive. Such categorization, it should be noted, however, does not imply an acceptance of, or a wish to perpetuate, politically constructed categories of identity. Racial classifications are used, paradoxically perhaps, to try to understand, and possibly address, the consequences of the socially constructed, politically motivated segregation imposed by apartheid.

During the years of apartheid, racial groupings were accorded many different labels, both by the system itself and by those being labelled. This study uses the terms 'Black', 'Coloured', 'Indian' and 'White' with the realization that these terms are all historically loaded and contentious and may not be the terms of preference both for the participants in and readers of this research.

Chapter 1 : INTRODUCTION

1.1. BACKGROUND TO THE STUDY

This investigation of the point prevalence[1] of possible[2] minor psychiatric morbidity[3] (MPM) at the University of Cape Town (UCT) Student Health Service (SHS) was initiated by requests from the principal psychologist at the service, together with recommendations by a psychologist who has worked there. It represents an attempt to begin to estimate the point prevalence of possible psychiatric morbidity in students presenting for medical services at the SHS, as well as to gain an understanding of their experience of trauma, adjustment to university and the nature and extent of substance abuse. Mental Health Professionals (MHP)[4] at the SHS identified a need for research into the impact of violence upon students utilizing the service. They felt that a high proportion of students attending the mental health services at SHS have experienced, or been exposed to, recent trauma, both within and beyond the university. The MHP's at SHS also expressed concerns about the adjustment of students to university, as well as the effects of, and reasons for, high levels of substance abuse. Based upon Goldberg and Huxley's (1980) model of help seeking for psychiatric illness, the extent to which medical personnel recognize mental health difficulties, as well as patterns of treatment and referral are examined. Although this research is based specifically upon the SHS, it has possible implications for mental health services offered for students at UCT as a whole.

[1] *See appendix 1 for definitions of the epidemiological term 'prevalence'*

[2] *No second stage clinical interviews were utilized in this study to validate the screening instrument. Cases identified by the screening instrument, therefore, can only be understood as 'possible' or potential cases (see Chapter 2 section 2.4.1.1.1.).*

[3] *The term 'minor psychiatric disorders' essentially refers to the 'neurotic' disorders (as opposed to 'psychotic' disorders) which do not require hospitalization or which do not necessarily impair functioning to too great an extent. Goldberg and Huxley (1992) used the term 'Common Mental Disorders'. Patel (1998) comments that 'Common mental disorders are the contemporary equivalent of the neuroses, a descriptive category which has become increasingly unpopular because of its vague meaning and stigma' (p. 4). See section 1.3.1.2.2. for a discussion of 'psychiatric caseness'.*

[4] *Psychologists, psychiatrists, social workers*

1.2. CHAPTER OUTLINE

Chapter 1 includes a brief **background** to this study, outlining the motivations and reasons for its undertaking. Literature pertinent to the study is then reviewed. This **literature review** discusses issues relating to the **epidemiology of MPM in general health care settings**, using **Goldberg and Huxley's (1980) model** as a framework. It focuses, also, upon **exposure to civilian trauma** in South Africa and on South African university campuses and the effects of such exposure, particularly **Posttraumatic Stress Disorder**. Issues relating to **adjustment to university**, again specifically in the South African context, are examined. Finally, the review considers the issues of **substance abuse**, particularly amongst youth and young adults in South Africa. The literature review is followed by an outline of the **objectives of this research**.

Chapter 2 outlines the **method of research**. It considers issues such as **population and sampling**, **research design** and **site** of the research. It also examines the **instruments** used in this research, including the **Self-Reporting Questionnaire**, and looks at issues related to its **validity and reliability**. Methods of **data collection** are summarized and **ethical considerations** related to this research are discussed. Finally **statistical methods of analysis** and the related issue of **type 1 errors** are examined.

Chapter 3 describes the **results** of this study. These include **sociodemographic factors** such as **gender** and **'race'**; the proportions of students attending the SHS and UCT as a whole in relation to these variables are compared. An estimated **prevalence rate of possible MPM**, as well as the **prevalence of exposure to civilian trauma**, **Posttraumatic Stress Disorder** and **risky drinking** and **drug abuse** are reported. The relationship between these prevalence rates and gender and 'race' are also outlined. Subjective sense of **adjustment to university**, **financial** and **academic coping** are described and related to the prevalence of MPM. The rate of **detection of MPM** by medical practitioners is reported, together with **patterns of referral**.

Chapter 4 summarizes the main results obtained in this study. It also discusses **limitations** associated with the research. Possible **implications** of the findings of the study are discussed and **recommendations** made.

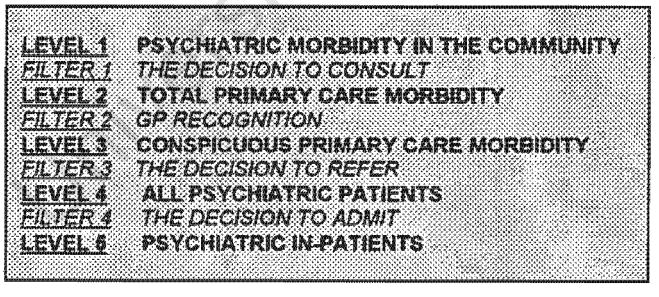
1.3. LITERATURE REVIEW

This review will examine the epidemiology[5] of psychiatric disorders in clinic settings, the effects of violence and civilian trauma, adjustment to university, substance abuse and student mental health services. Since this involves an enormous and diverse body of literature, a selective and specifically focused review will be presented.

1.3.1. MINOR PSYCHIATRIC MORBIDITY AND 'THE PATHWAY TO PSYCHIATRIC CARE' (GOLDBERG & HUXLEY,1980)

Goldberg and Huxley (1980) present a model, consisting of levels and filters, which describes psychiatric disorder in the community and the process of reaching specialist care (see Figure 1.1.).

Figure 1.1. *'The pathway to psychiatric care' (Goldberg & Huxley, 1980)*



Level 1 refers to psychiatric and emotional disturbance in the community as a whole. Murray and Lopez (1996) provide a framework for conceptualizing the prevalence of psychiatric morbidity in the general community. In an assessment of global health needs in 1990, with projections to 2020, Murray and Lopez (1996)

[5] *Epidemiology is the 'study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems' (Last, 1988, p. 42).*

state that 'the burdens of mental illness...have been seriously underestimated by traditional approaches...while psychiatric conditions are responsible for little more than 1% of deaths, they account for almost 11% of disease burden worldwide' (p. 3). Of the 10 leading causes of disability worldwide in 1990 (measured in years lived with disability), 5 were psychiatric conditions: unipolar depression, alcohol use, bipolar affective disorder, schizophrenia and obsessive compulsive disorder (Murray & Lopez, 1996). Projections indicate that psychiatric and neurological conditions could increase from 10.5% of the total global disease burden to almost 15% in 2020 (Murray & Lopez, 1996).

A proportion of such people will pass through *filter 1* to *level 2* by deciding to and, thereafter, consulting a general practitioner. Sashidharan, Surtees, Kreitman, Ingham and Miller (1988) assert that only a very small proportion of community cases of psychiatric morbidity are ever seen in treatment settings. Gater et al. (1991) indicate that in different cultural settings other pathways of care, such as consultation with indigenous healers, might be utilized.

Level 2 consists of all psychiatric and emotional morbidity that presents to general practitioners, much of which presents somatically. A proportion of these patients will not pass through *filter 2* - that is, the psychological nature of their complaints will not be recognized by the general practitioner and they are referred to as the 'hidden psychiatric morbidity'. Level 3 consists of all psychiatric and emotional morbidity that is recognized and identified by the general practitioner - 'conspicuous psychiatric morbidity'. Much of this will be treated by the general practitioner him/herself. A proportion, however, will pass through filter 3 by being referred to specialized psychiatric services. Some of these will pass through filter 4 by being hospitalized.

Parry and Swartz (1997) indicate, thus, that movement from one level to another depends upon a combination of the symptoms themselves, people's understanding of their own symptoms and their consequent actions, the ability of clinicians to detect disorder, patterns of referral and available resources.

1.3.1.1. *FILTER 1*: FACTORS THAT INFLUENCE THE DECISION TO CONSULT A GENERAL PRACTITIONER OR PRIMARY HEALTH CARE FACILITY

The presence of MPM increases the probability of consulting a general practitioner (GP) (Burvill & Knuiman, 1983; Goldberg, Kay & Thompson, 1976; Shepherd, Cooper, Brown & Kalton, 1966; Williams, Tarnopolsky, Hand & Shepherd, 1986). Burvill and Knuiman (1983), however, indicate that the relationship of increased consulting rate to severity of MPM is not a linear one - the rate of increase decreases as the severity of psychiatric morbidity increases.

Many researchers indicate that women suffering from MPM are more likely than are men to visit their GP or PHC facility (i.e. the first filter [Goldberg & Huxley, 1980] is more permeable to women than to men) (e.g. Burvill & Knuiman, 1983; Gove, 1978; Kessler, 1981; Patel, 1998; Patel et al., 1997; Shepherd et al, 1966; Vasquez-Barquero, Wilkinson, Williams, Diez-Manrique & Pena, 1990; Verhaak, 1995; Williams et al., 1986). Whereas Verhaak (1995) suggests that women experiencing MPM are not more likely to unequivocally present psycho-social complaints as a reason to see their doctor, Goldberg et al. (1976) note that males are less likely to attend with psychological symptoms than females. When males do attend they are less likely to give a psychological presenting complaint. Horwitz (cited in Goldberg & Huxley, 1980) suggests that women are more likely than men to recognize psychiatric difficulties, to discuss these problems with other people and to enter treatment voluntarily. A number of researchers, moreover, have indicated that the prevalence of common mental disorders amongst women is higher than amongst men (Blue, Ducci, Jaswal, Ludermir & Harpham, 1995; Williams et al., 1986) and several studies report this pattern in developing countries (e.g. Almeida-Filho, 1987; Rumble, Swartz, Parry & Zwarenstein, 1996).[6]

Some studies in developing countries have disputed these findings. Dhadphale, Ellison and Griffin (1983) in a study of the frequency of psychiatric disorders among patients attending out-patient clinics in Kenya, found no sex-difference in the prevalence of MPM. This is similar to the finding of Giel and Van Luijk (1968) in Ethiopia.

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[6] *See Blue et al. (1995) for a discussion of possible explanations for this gender disparity.*

1.3.1.2. *LEVEL 2:*

1.3.1.2.1. MINOR PSYCHIATRIC MORBIDITY AND GENERAL HEALTH CARE SETTINGS

Studies, in developed and developing countries, have indicated that there is a substantial prevalence of MPM in those presenting in general health care (GHC) settings. It is suggested that more than one third of those presenting consecutively in primary health care (PHC) settings with somatic complaints manifest symptoms of psychological distress and that about 20% are diagnosable with minor psychiatric disorders (Dhadphale et al., 1983; Ormel, Koeter, Van den Brink & Van de Willige, 1991; Williams et al., 1986).

These patients often present somatically[7] (Gater et al., 1991; Goldberg & Huxley, 1980; Patel,1988; Patel et al., 1997; Petersen, Bhagwanjee, Parekh, Paruk & Subedar, 1996; Rumble et al., 1996; Shepherd et al., 1966). In a study by Goldberg and Blackwell (1970) almost a quarter of the patients were identified as psychiatrically ill but only 7.8% had presented with symptoms that were entirely psychological; the remainder had some combination of somatic and affective symptoms. Of patients assessed by Goldberg, Rickels, Downing and Hesbacher (1976) as having significant psychiatric symptoms, only one tenth did not present with somatic symptoms. A little over half of the patients with a diagnosable psychiatric disorder seen in a primary care setting in the United States will have significant somatic symptom-formation accompanying their mood disorders (Goldberg & Huxley, 1980). Ndetei and Muhangi (1979) report 28 cases (20%) of psychiatric disorder among 140 attenders at an outpatient clinic in Kenya, but report that none of the patients complained of anxiety or depression. Giel and Van Luijk (1969) report a similar situation in their study of outpatient clinic attenders in an Ethiopian town: three quarters of the 64 psychiatric cases presented somatically.

[7] *See appendix 2 for a discussion of somatization*

1.3.1.2.2. PSYCHIATRIC 'CASENESS'

To discuss what constitutes a 'psychiatric case' is to enter into a complex and lengthy debate. For the epidemiologist, case identification frequently involves a 2-stage procedure; the use of a standardized interview schedule involving a threshold point for caseness, followed by a clinical interview to validate the findings of the schedule and its chosen cut-off point.

The above-mentioned procedure is defined as the 'categorical model' of case identification. Proponents of the so-called 'dimensional model', however, suggest that disease is a continuously distributed variable in the community and that a chosen threshold between mental health and illness is inappropriate (Goldberg & Huxley, 1980; Williams, Tarnopolsky & Hand, 1980). However, it is impossible to establish prevalence rates without subscribing to the 'categorical model' and the dichotomies it imposes.

1.3.1.2.3. RESEARCH ON THE PREVALENCE OF MINOR PSYCHIATRIC MORBIDITY IN GENERAL HEALTH CARE SETTINGS [8]

The prevalence of MPM found in clinic studies in developing countries has been varied as can be seen in Table 1.1. which outlines prevalences obtained in studies of adult outpatient attenders.

[8] *This review will focus exclusively upon research on the prevalence of MPM undertaken with adults in clinic/outpatient settings (i.e. level 2 of Goldberg and Huxley's [1980] model) in developing countries. For information on the prevalence of MPM in community settings in developing countries see Bhagwanjee, Parekh, Paruk, Petersen and Subedar (1998); Blue et al. (1995); Orley and Wing (1979); Petersen et al. (1996); Rahim and Cederblad (1989); Rumble (1994); Tafari, Aboud and Larson (1991); Vasquez-Barquero et al. (1990)*

Table 1.1. *The prevalence of minor psychiatric morbidity in general health care settings in developing countries*

Authors	Location	Instrument	Sample	Prevalence
De Jong, De Klein and Ten Horn (1986)	Guine-Bissau	SRQ/PSE	n=252 >15yrs	12%-18% ••
Dhadphale and Ellison (1983)	Kenya (urban)	SRQ/SPI	n=200 18-55yrs	32% •
Dhadphale, Ellison and Griffin (1982)	Kenya (rural)	SRQ/SPI	n=186 18-55yrs	25.8% •
Diop, Collignon, Gueye and Harding (1982)	Senegal	SRQ (1 stage)	n=933 adults	16.2%
Freeman, Seris, Mathebula and Price (1991)	South Africa (SE Transvaal)	SRQ/PSE	n=363 >15yrs	8.3%* ••
Gureje and Obikoya (1992)	Nigeria	GHQ12/CIDI	n=787	35.1%
Hall and Williams (1987)	Zimbabwe	SRQ/PSE	n=448 >16yrs	10.5% ••
Harding et al., (1980)	Sudan	SRQ/PSE	n=360 >17yrs	10.6% •
Kortmann (1990)	Ethiopia	SRQ	n=30 >17yrs	27% •
Mari and Williams (1984)	Brazil	GHQ/CIS	n=120 >15yrs	46% ••
Miller, Swartz and Rumble (1991)	South Africa (Mamre)	GHQ28 (1 stage)	n=159 >15yrs	45%
Ndetei and Muhangi (1979)	Kenya	Clinical Examination (1 stage)	n=140	20%
Oduowle and Ogunyemi (1984)	Nigeria	GHQ-30 (1 stage)	n=80	69%
Patel (1998)	Zimbabwe	SSQ/CISR/clinical judgement of care provider	n=152	27%
Reeler, Williams and Todd (1993)	Zimbabwe	SRQ (1 stage)	n=1236	26%
Zwi and Thom (1991)	South Africa (Soweto)	SRQ/PSE	n=301 16-60yrs	10.3%-14.3% ••

**Parry (1996) suggests that the low prevalence of MPM reported by Freeman et al. (1991) may be a result of the high cut-off score used on the SRQ.*

In comparing prevalence estimates, it should be noted that those studies marked •• did not validate their screening instrument for the particular context of the study and those marked • did not weight their prevalence estimates back to the original sample. (See Chapter 2, section 2.4.1.1.1. and Table 2.3.). The implication of this is that, strictly, these prevalence estimates are not directly comparable.

CIDI = Composite International Diagnostic Interview
CIS= Clinical Interview Schedule
CISR = Revised Clinical Interview Schedule
GHQ= General Health Questionnaire
PSE= Present State Examination
SSQ= Shona Symptom Questionnaire

1.3.1.3. *FILTER 2:* DETECTION OF MINOR PSYCHIATRIC MORBIDITY BY GENERAL PRACTITIONERS

A number of studies indicate that psychiatric disorders are not adequately recognized or diagnosed by GP's (e.g. Casey, Dillon & Tyrer, 1984; Ormel et al., 1991; Von Korff et al., 1987; Zung, Magill, Moore & George, 1983). Patients are invariably treated for physical illnesses with the local clinicians not always aware of the presence or the magnitude of psychiatric morbidity (Williams et al., 1986). As such, difficulties experienced by patients are not adequately addressed and patients frequently become chronic repeat attenders. Expensive and unnecessary investigations may be undertaken with the prescription of medication possibly resulting in iatrogenic morbidity. This pattern has obvious implications for the efficacy of treatment both in terms of cost to the individual and the institution and benefit to the patient (Freeman et al., 1991; Parry & Swartz, 1997).

Ormel et al. (1991) found that detection rates for severe and multiple disorders (comorbidity) were higher than those for less severe and single disorders. Their study indicates, moreover, that patients with recognized disorders were more likely to receive mental health interventions. Goldberg and Huxley (1980) and Ormel et al. (1990) have shown that divorced, widowed and separated women and the middle aged are more easily recognized as 'cases' by general practitioners than are single women and those below 25 or above 65 years. Psychiatric disorders amongst the unemployed, amongst those seen frequently before and those who present with psycho-social symptoms were also more easily identified. Identification was less likely amongst students, the unmarried, those who present with somatic symptoms and those who had received higher education. Harding et al. (1980) concur that it is those patients who present somatically who are most likely to be missed. In their research, the majority of cases missed by the health workers were among patients complaining of headaches, abdominal pain, cough, back pain and weakness. Goldberg and Huxley (1980) note that it is possible that

> certain stereotyped notions about 'typical patients' with minor psychiatric disturbance tend to increase the doctor's vigilance and thus increase the likelihood of detection; while certain other 'negative stereotypes' serve to lower the doctor's vigilance: thus, a middle aged woman whose marriage had broken up would be more likely to have

her disturbance detected than a young professional man, even if they each had the same number of symptoms (p. 82).

They note, moreover, that increased identification with frequent consultation is understandable since the doctor will have had more opportunity to observe the patient. Many of the disorders detected by screening questionnaires are transient and likely to remit spontaneously (Goldberg & Huxley, 1992). Goldberg and Blackwell (1970) found that even a general practitioner who was also a psychiatrist failed to detect one third of the psychiatric disorders detected by a research procedure.

Hall and Williams (1987) in a study in Zimbabwe found a 4.25% detection rate by health workers and Abiodun (1989) in Nigeria a 14.6% detection rate. Thom, Zwi and Reinach (1993) note that 93% of the patients diagnosed by the research workers as having a psychiatric disorder were missed by the clinic staff. Ormel et al. (1990) found that GP's missed half of the PSE cases and typically assigned non-specific diagnoses to recognized cases. Ormel et al. (1991) found that only 47% of those patients who met diagnostic criteria for anxiety, depression or ill-defined disorder had their psychiatric disorder recognized by their GP. Harding et al. (1980), in a study of patients attending primary health care facilities in 4 developing countries, found that the health workers correctly detected one third of the psychiatric cases. Freeman et al. (1991) reported that fewer than one third of the mental health problems identified by the researchers were identified by the clinic staff. De Jong et al. (1986) reported that in their study of general health facilities in Guine-Bissau, only one out of every 3 patients with a psychiatric disorder was recognized by general health workers and out of every 100 non-cases, 12 were wrongly diagnosed by health workers as suffering from a psychiatric disorder. In Brazil, Mari and Williams (1984) found that 71% of psychiatric disorders were detected by health workers - 29% remained 'hidden'.

lack of referrals after recognition

TO SPECIALIST MENTAL HEALTH

urveyed by Shepherd et al. (1966) referred only
ed as experiencing psychiatric symptoms to
They were less likely to refer acute cases than
es were referred against 7.5% of chronic cases.
or those referred to be more severely ill - 25% of
ese GP's were referred but only 5% of other
t al. (1991) suggest that somatic presentations are
r to referral to specialist mental health services
since such patients require physical investigations. They state, moreover, that patients seeking help from indigenous healers frequently experience longer delays before being referred to specialist mental health services.

Fink, Shapiro and Goldensohn (1970) compared patients who referred themselves to psychiatric care and those who were referred by their general practitioner. Those who referred themselves were shown to be younger, better educated and more likely to have used mental health services before. The doctor referred group were less well educated and often reported less serious or disabling emotional difficulties.

1.3.2. EXPOSURE TO AND EFFECTS OF CIVILIAN TRAUMA

As previously mentioned, MHP's at the UCT SHS observed that a high proportion of students attending the service have been exposed to traumatic events. This section reviews literature on exposure to civilian trauma in South Africa and on South African university campuses. It also examines some of the potential emotional sequelae of such exposure which contributes to level 2 of Goldberg and Huxley's (1980) model (i.e. total primary care morbidity).

1.3.2.1. EXPOSURE TO CRIMINAL VICTIMIZATION AND CIVILIAN TRAUMA

There is an extensive literature exploring the prevalence of exposure to violent crime and other civilian trauma. Most of this is American based research, the findings of which are specific to the United States and will not be presented in this review (e.g. Breslau, Davis, Andreski & Peterson, 1991; Fitzpatrick & Boldizar, 1993; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995; Kilpatrick, Saunders,

Veronen, Best & Von, 1987; Pastore, Fisher & Friedman, 1996; Resnick, Kilpatrick, Dansky, Saunders & Best, 1993; Schubiner, Scott & Tzelepis, 1993; Singer, Anglin, Song & Lunghofer, 1995).

1.3.2.1.1. CRIMINAL VICTIMIZATION IN SOUTH AFRICA

The quarterly report of the Crime Information Management Centre (South African Police Service, 1997), states that 'the incidence of crime [in South Africa] remains unacceptably high, especially with regard to violent crime' (p. ii). In comparing the 1997 South African crime ratios with the 1994 Interpol ratios reported for 89 member states, they conclude that South Africa occupies 4th place with regard to reported cases of murder, has the highest incidence of reported cases of rape and occupies eleventh position with regard to reported cases of serious assault. Kilpatrick and Resnick (1992) note that figures pertaining to criminal victimization obtained from methodologically sophisticated victimization research are likely to exceed those obtained by government crime surveys.

In 1991, 1787 adolescents aged 14-19 years presented at Groote Schuur Hospital Trauma unit for treatment of injuries arising from assault (personal communication quoted in Flisher, Ziervogel, Chalton, Leger & Robertson, 1993c). In their study of high school children in the Cape Peninsula, Flisher et al. (1993c) found that, of the total sample, 12.7%, 9.6% and 13.8% had been physically injured by another person at school, at home and elsewhere, respectively. Eleven percent had injured someone else during the previous year. In a study of Xhosa speaking children (10-16 years) in Khayelitsha who have been exposed to community (both criminal and political) violence, Ensink, Robertson, Zissis and Leger (1997) reported that all 60 children had been exposed to indirect violence, 57 (95%) had witnessed violence and 34 (56%) had experienced violence themselves. Only 3 children had not directly witnessed or experienced violence. The type of violence experienced by these children included being chased by strangers or gang members, physical and sexual assault and being threatened. Forty-five percent had witnessed at least one killing, 55% had witnessed at least one stabbing, shooting or other violent attack, 33% had seen at least one dead body and 40% had heard gunshots.[9]

[9] *For further literature on violence in South Africa and in Cape Town see Butchart, Seedat and Nell (1996), Lerer, Matzopolous and Bradshaw (1995), Zwi, Radebe, Ratemane, Freeman and Harris, (1995)*

1.3.2.1.2. CRIMINAL VICTIMIZATION ON SOUTH AFRICAN UNIVERSITY CAMPUSES

Given the focus upon students in this study, statistics pertaining to levels of criminal victimization on South African university campuses will be briefly reviewed. University of Cape Town (UCT) Campus Control statistics (1997) indicate that in 1997, 24 incidents of common assault on UCT campus were reported, 8 of assault with the intent to cause grievous bodily harm, 5 of assault by gesture, 3 incidents of armed robbery and 2 of rape[10], 67 cases of malicious injury to property, 2 cases of the possession of offensive weapons and 1 case of threatening and abusive behaviour. Potgieter (1993) cautions that a proportion of crimes experienced on campuses are reported to the national police and thus do not appear in Campus Control statistics.

In research focusing upon campus safety at UCT, Rex (1995) reports that 16% of respondents were very concerned about their personal safety at UCT during the day and 47% of respondents were very concerned about their personal safety at night. 25% were very concerned about verbal abuse whilst on campus and 28% were very concerned about sexual harassment. Broadly, Rex (1995) asserts that at UCT in 1994, 'women students...[were] significantly more concerned about crime [particularly sexual harassment] than...[were] male students. Black students tend[ed] to be more concerned than white students, and residence students...[were] likely to be exposed to more crime than [were] non-residence students' (p. 33).

In a study of campus crime at 42 South African universities and technikons from January to June 1992, Potgieter (1993) presents the following statistics:-
*Ninety-five cases of common and serious assault were reported. In 19 cases, fists had been used during the assault while in 15 cases the victim was attacked with an open hand. In 12 cases knives were used an instrument of assault and in 8 cases bricks/rocks were used. Sixty-four victims sustained an injury after an assault.
* Nine cases of rape or attempted rape were reported.
* Two cases of armed robbery were reported.

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[10] *For more information on rape and sexual harassment at South African universities see Burton, Green and Scott (1992), Ramphele, Molteno, Simons and Sutherland (1991), Omar and de Waal (1994), Russell (1993a, 1993b).*

UCT has taken seriously the problem of criminal victimization on campus. In 1991, the then Deputy Vice Chancellor, Dr. Mamphela Ramphele, initiated a commission of enquiry into sexual harassment at UCT. In November 1997, as Vice Chancellor, she appointed a Risk Management Committee responsible for ensuring a safe campus environment for students, staff and visitors (New UCT initiative to ensure a safe, secure campus, 1997). The committee has stated its vision as being to 'ensure a safe and secure campus for all students, staff and visitors'.[11]

1.3.2.2. THE EFFECTS OF EXPOSURE TO CRIMINAL VICTIMIZATION

A growing body of literature (e.g. American Psychological Association Task Force Report, 1984; Janoff-Bulman & Frieze, 1983; Kilpatrick et al., 1985; Kilpatrick, Resick & Veronen, 1981; Kilpatrick et al., 1987; Lurigio, 1987; Resick, 1987) suggests that criminal victimization can have serious effects on emotional well being and on the emotional well being of adolescents and young adults in particular.

Pastore et al. (1996), in a study of violence and mental health problems among urban American high school students, found that students who reported knowing someone who was murdered were twice as likely to report suicidal ideation and four times as likely to report suicide attempts. Witnessing a stabbing was associated with twice the likelihood of reporting suicide ideation and three times the likelihood of reporting suicide attempts. Witnessing a shooting was associated with twice the likelihood of alcohol use (see also Schubiner et al., 1993). In a study of the effects of exposure to violence upon adolescents (14-19yrs), Singer et al. (1995) report that exposure was significantly associated with depression, anger, anxiety, dissociation, posttraumatic stress and total trauma symptoms. Fitzpatrick and Boldizar (1993), looking at the consequences of exposure to violence among low-income African-American youth (15-18yrs old), indicated that being victimized and witnessing violence were significantly related to the reporting of Posttraumatic Stress Disorder

[11] *For further detail on campus crime and violence beyond the South African context see Sherrill and Siegel (1989)*

(PTSD) symptoms (based upon DSMIII-R [American Psychiatric Association, 1987] criteria). Several other studies have documented a link between exposure to violence among youth, either as victim or witness, and their reporting of PTSD symptoms (Figley, 1989; Jaffe, Wolfe, Wilson & Zak, 1986).

Kilpatrick et al. (1985) in a study of a representative sample of adult women suggest that rates of 'nervous breakdowns', suicidal ideation and suicide attempts were significantly higher for crime victims than for nonvictims.[12]

1.3.2.3. POSTTRAUMATIC STRESS DISORDER[13]

The literature on PTSD is diverse and extensive. This review is limited to literature on PTSD as a consequence of exposure to criminal victimization and civilian trauma. This necessitates inclusion of a discussion of the definition of trauma. It will also focus briefly on issues of comorbidity and chronicity.

1.3.2.3.1. DEFINING TRAUMA/ THE 'CRITERION A ISSUE'

Within the DSMIII-R (American Psychiatric Association, 1987) and DSMIV (American Psychiatric Association, 1994) diagnostic descriptions of PTSD, Criterion A, the traumatic event, serves as 'the gatekeeper' (Davidson & Foa, 1991. p. 346) to PTSD. If a person does not fulfill Criterion A - the required definition of a stressful event - even though he/she might manifest all the subsequent symptoms of PTSD - this person cannot be diagnosed with PTSD. This issue has generated a great deal of debate. Issues central to this debate are that of stressor magnitude and subjective perception (March, 1992)

The DSMIII-R (American Psychiatric Association, 1987) provides a benchmark for stressor magnitude by stating that events must be 'outside the range of usual human experience' - they should therefore be catastrophic rather than everyday events. The DSMIII-R (American Psychiatric Association, 1987) explains that 'usual

[12] *For more detail on the prevalence of PTSD in particular as a result of criminal victimization and civilian trauma see Section 1.3.2.3.2.*
[13] *For DSMIII-R (American Psychiatric Association, 1987) and DSM-IV (American Psychiatric Association, 1994) diagnostic criteria for PTSD see appendix 3*

human experiences' includes events such as 'simple bereavement', chronic illness, business losses and marital conflict'. The DSMIV (American Psychiatric Association, 1994) stipulates stressor magnitude somewhat differently by stating that the event experienced, witnessed or confronted must involve 'actual or threatened death or serious injury or a threat to the physical integrity of self or others'.

March (1992) suggests that

> despite general agreement that increasing intensity (dose) of exposure is proportional to PTSD risk, it can be argued that discriminating quantitatively between 'catastrophic' and 'everyday' events (according to DSMIII-R criteria) presents an impossible conundrum since what is 'outside the range of usual experience' for one person may not be for another and events of lower magnitude still result in symptoms of PTSD (p. 40).

Similarly, in accordance with DSMIV (American Psychiatric Association, 1994), events that do not involve 'actual or threatened death or serious injury or a threat to physical integrity' might, as research has indicated, still produce symptoms of PTSD. Burstein (1985 in March, 1992) found that 8 of 73 patients developed the symptoms of PTSD without meeting either DSMIII-R or IV (American Psychiatric Association, 1987 and 1994 respectively) criteria for stressor severity. Nonqualifying stressors included marital disruption, failed adoption plans and death of a loved one. Helzer et al. (1987 in March, 1992) found that miscarriage, a spouse's affair and poisoning were associated with PTSD. Solomon and Canino (1990 in March, 1992) found that PTSD symptoms were more prevalent in persons experiencing common events (money problems, household injury/illness) than in persons exposed to a natural disaster.

Whether or not an event is traumatic depends also upon subjective perception and individual vulnerabilities. Thus, even under the most horrible circumstances, some individuals do not develop PTSD. Davidson and Foa (1991) suggest that the likelihood of developing the symptoms of PTSD is determined partly by the magnitude of the trauma and partly by predisposing factors on the part of the victim. They argue that extreme traumatic events, above a given severity threshold, are

likely to induce PTSD (at least initially) in most individuals, regardless of predisposition. At the opposite end, events that are minimally stressful to most people could be traumatic in the presence of multiple predisposing factors (e.g. genetic, early deprivation, prior psychiatric illness, prior stress and personality factors). Evidence for the importance of subjective perception is provided by studies demonstrating that higher levels of perceived threat (Green et al., 1985 in March, 1992), perception of suffering (Speed et al., 1989 in March, 1992) and cognitive perception of low controllability (Frye & Stockton, 1982 in March, 1992) exacerbate the risk for PTSD. Pilowsky (1985 in Davidson & Foa,1991) describes the emergence of PTSD-like symptoms in accident victims whose perception of danger far exceeded the actual risk.

Davidson and Foa (1991) argue that 'it may be unjustified to exclude people from the diagnosis of PTSD if in fact they have developed Criteria B, C and D symptom complex after low magnitude or universal experience [events]' especially since such persons may require treatment regardless of how their symptoms were induced (p. 347). This is an argument based upon clinical principles. In the context of research, however, there is legitimate concern that the loosening of Criterion A may result in too loose an application of the concept, thereby increasing false positive diagnoses. Conversely, of course, a narrow definition of Criterion A would increase false negative diagnoses by eliminating those people who develop PTSD after experiencing events of relatively low magnitude (March, 1992). Kilpatrick and Resnick (1992) note, moreover, that in a research context, linkage between specific stressor(s) and PTSD symptoms may be complicated and difficult when there is a history of multiple events. As March (1992) states,

> in summary, both the narrow and broad formulations of the stressor criterion pose problems in that they invite theoretical confusion, lack clinical utility and fail to optimize the operating characteristics of criteria set. Moreover, they fail to represent the empirically derived multicausal/multieffect approach that will be required to better understand potentially traumatic interactions between people and environmental events. (p. 49). [14]

[14] *For decisions made regarding the 'criterion A' issue in this study, see Chapter 2 section 2.4.1.2.*

1.3.2.3.2. THE PREVALENCE OF CIVILIAN TRAUMA AND CRIME RELATED PTSD

The results of studies on the prevalence of PTSD as a consequence of civilian trauma have been varied. Table 1.2. outlines prevalences obtained by a number of authors. It is evident from the figures shown in the table that the rate of PTSD appears to be higher amongst crime versus non-crime victims (Resnick et al., 1993), amongst women versus men (Breslau et al., 1991; Fitzpatrick & Boldizar, 1993; Kessler et al., 1995; Shore et al., 1989) and amongst victims of sexual assault (Breslau et al., 1991; Kessler et al., 1995; Kilpatrick et al., 1987; Resnick et al., 1993). Breslau et al. (1991) account for higher prevalences amongst women by suggesting that, following a traumatic event, women are more vulnerable than men to developing PTSD. Kilpatrick and Resnick (1992) assert that, in general, the rates of PTSD associated with indirect victimization (e.g. witnessing an event) appear to be comparable with those associated with direct victimization (e.g. experiencing an event).

A number of factors may account for variations in prevalence rates. Earlier studies which utilized DSMIII (American Psychiatric Association, 1980) criteria have, by and large, arrived at smaller prevalence rates than those using DSMIII-R (American Psychiatric Association, 1987) criteria. Keane and Penk (1988) suggest that the Diagnostic Interview Schedule (DIS)[15] based upon DSMIII (American Psychiatric Association, 1980) criteria may underestimate the prevalence of PTSD. Prevalence rates also differ in accordance with definitions of Criterion A, criteria for the duration of symptoms and assessment at various periods post-crime (Kilpatrick & Resnick, 1992). Moreover, Resnick et al. (1993) used telephone interviewing which might have influenced reporting and Breslau et al. (1991) suggest that recall bias might have been minimized in their study as a result of the young age of respondents. In Resnick et al's. (1993) study, in contrast to those of Helzer et al. (1987) and Breslau et al. (1991), respondents were not required to link their symptoms to a specific traumatic event. Advantages of this approach are that it does not require insight on the part of the respondent about symptom-event correspondence and that it allows for straightforward assessment of symptom presence in individuals who may have experienced multiple traumatic events.

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[15] *The Diagnostic Interview Schedule (DIS) or some modified version of it is the most frequently used PTSD assessment interview (Kilpatrick & Resnick, 1992).*

Table 1.2. *Prevalence rates of PTSD as a consequence of civilian trauma*

AUTHOR(S)	LOCATION	SAMPLE	INSTRUMENT	PREVALENCE													
				Total		Trauma		Crime		Non-Crime		Sexual Ass		Men		Women	
				L%	C%	L%	C%	L%	C%	L%	C%	L%	C%	L%	C%	L%	C%
Breslau, Davis, Andreski and Petersen (1991)	Detroit	n=1007 21-30yrs	DIS DSMIIIR criteria	9.2		24						80		6		11.3	
Breslau, Davis, Petersen and Schultz (1997)	Michigan	n=801 mothers	DIS DSMIIIR criteria *	13.8													
Davidson, Hughes, Blazer and George (1991)	Piedmont N. Carolina	n=2985 18-95yrs	DIS DSMIII criteria	1.3	0.44												
Fitzpatrick and Boldizar (1993)	US	low income African American youth	adaptation DSMIIIR criteria		27												
Helzer, Robins and McEnvoy (1987)	ECA St Louis	n=2493 mean age=38.7	DIS DSMIII criteria	1													
Kessler, Sonnega, Bromet, Hughes and Nelson (1995)	National Comorbidity Survey		DSMIIIR criteria	7.8										5		10.4	
Kilpatrick, Saunders, Veronen, Best and Von (1987)	Community sample - US	295 crime 96 control mean age=39.8	DIS DSMIII	20.9	5.6	27.8	7.5	27.8	7.5			57.1	16.5				
Kilpatrick, Best and Amick-McMullan (1989)**	National random sample- US	1549 trauma victims 48 nonvictims	DSMIIIR	19	5												
Resnick, Kilpatrick, Dansky, Saunders and Best (1993)	US	4008 adult women 18-34yrs	DSMIIIR	12.3	4.6	17.9	6.7	*** 25.8	*** 9.7	*** 9.4	*** 3.4	38.5	17.8				
Shore, Vollmer and Tatum (1989)	rural northwest communities -US not at risk from Mt St Helens At risk	n=477 n=548	DIS DSMIII criteria	2.6 3.6										2.9		3.3	

** excluded traumatic events which did not accord with criterion A of DSMIIIR* ***in Kilpatrick and Resnick (1992)*

****see appendix 4 for events defined as crime and non-crime events by Resnick et al. (1993)*

Key - L%=lifetime PTSD, C%=current PTSD

Total refers to total sample and trauma to those who have experienced trauma

Epidemiologists (e.g. Kolb, 1989) believe that PTSD in the community frequently goes unrecognized by both the medical and psychiatric professions. Recognition and treatment, however, may prevent long term psychosocial impairments such as alcoholism, suicide, violence and difficulty holding employment (Kolb, 1989). Kolb (1989) suggests that sufferers seldom spontaneously offer information and this contributes to the frequency with which the disorder is missed or mis-diagnosed in the general health setting. Davidson and Smith (1990) concur that in a clinical setting this disorder is not sufficiently recognized, even by psychiatric personnel.

1.3.2.3.3. RISK FACTORS FOR PTSD

Breslau et al. (1991) found the following factors to be associated with increased vulnerability to PTSD subsequent to exposure to traumatic events: female sex, prolonged childhood separation from parents, family history of anxiety, depression, psychosis and antisocial behaviour, pre-existing anxiety or depression and neuroticism.

Resnick et al. (1993) and Kilpatrick et al. (1989) suggest that incidents which pose a direct threat to life or the receipt of injury are a risk factor for PTSD. It has been repeatedly documented, moreover, (e.g. Breslau et al., 1991; Kessler et al., 1995; Kilpatrick et al., 1987; Kilpatrick et al., 1989; Norris, 1992; Resnick et al., 1993) that the event of completed rape poses a greater risk for development of PTSD than other crime events. In an unpublished study by Foa and Rothbaum (1989 in Kilpatrick & Resnick, 1992) and a study by Kilpatrick, Saunders and Amick-Mcmullan (1989 in Kilpatrick & Resnick, 1992), rates of PTSD associated with rape were significantly higher than rates associated with other crimes (63.3% for rape and 36.7% for crime in the first study and 57.1% for rape, 15.7-33% for other sexual assaults, 36.8% for physical assault and 18.2-28.2% for robbery/burglary in the second study).

1.3.2.3.4. PTSD AND COMORBIDITY

It has been widely indicated that PTSD is associated with other psychiatric disorders. Helzer et al. (1987) reported that persons with PTSD were twice as likely to experience obsessive compulsive disorder, dysthymia and bipolar disorder as were people without PTSD. Nearly 80% of those with PTSD had some other psychiatric disorder whereas 33% of those without PTSD had some other

psychiatric disorder. Breslau et al. (1991) reported that the 2 most prevalent disorders were major depression and alcohol abuse/dependence, diagnosed in 36.6% and 31.2% of the PTSD group. A total of 82.8% of persons with PTSD had one or more other psychiatric disorders. Breslau et al. (1997) established that 43.2% of a sample of women with PTSD had met criteria for major depression in their lifetimes. Davidson et al. (1991) similarly established that PTSD was associated with substantial psychiatric comorbidity (62% comorbidity). Respondents with PTSD were more than 20 times as likely than those without PTSD to have carried diagnoses of somatization disorder, schizophrenia/ schizophreniform disorder or panic disorder. Social phobia, obsessive compulsive disorder, generalized anxiety and major depression were all more than 10 times as likely to have occurred in PTSD subjects as compared to non-PTSD subjects. The likelihood of a PTSD respondent having any other DSMIII (American Psychiatric Association, 1980) disorder was 9.3 times greater than for non PTSD respondents. Bleich, Koslowsky, Dolev and Lerer (1997) noted that depression, anxiety disorders, minor affective disorders and alcoholism or drug misuse are frequently associated with PTSD. Shore et al. (1989) found a 92% comorbidity and indicate that generalized anxiety disorder, major depression, phobias and alcohol abuse were common co-morbid disorders. The first 3 disorders were 1.5 to 2.5 times more common among women. Kessler et al. (1995) indicate that a lifetime history of at least one other disorder was present in 88.3% of the men with lifetime PTSD and 79% of the women with lifetime PTSD.

The definition of PTSD by the DSMIII-R and DSMIV (American Psychiatric Association, 1987 and 1994 respectively) makes comorbidity with generalized anxiety disorder, panic disorder, social phobia and depression likely. Several of the Criterion D symptoms overlap with criteria for General Anxiety Disorder (irritability, poor concentration, hypervigilance, startlement, poor sleep). An overlap with social phobia, simple phobia and panic disorder may be expected on the basis of Criteria B2 and D6. It is also expected that PTSD and depression coexist because of the inclusion of loss of interest, a sense of foreshortened future, avoidance of other people and sleep impairment as diagnostic criteria for both PTSD and depression (Davidson & Foa, 1991).

The issue of the primacy of various disorders remains unresolved. Bleich et al. (1997), in their study of Israeli combat victims, suggest that the majority of patients in their study felt that PTSD and Major Depressive Disorder (both lifetime and current) emerged simultaneously after the traumatic event. An alternative hypothesis may be that major depression that develops after the traumatic exposure is a secondary consequence of PTSD. This is supported by studies that found PTSD to be antecedent to depression (Jordan et al., 1991 in Bleich et al., 1997; Mellman et al., 1992 in Bleich et al., 1997). Breslau et al. (1991), however, suggest that vulnerability to the effects of traumatic events is significantly increased in persons with preexisting diagnoses of anxiety or affective disorders. Breslau et al. (1997) propose that PTSD is not the cause of subsequent depression but a marker of pre-existing vulnerability to major depression that also increases the risk for PTSD. They postulate, moreover, that preexisting major depression increases the vulnerability for the PTSD inducing effects of traumatic events. Kessler et al. (1995) estimate that PTSD was primary with respect to all other comorbid disorders between 29.3% and 51.3% of the time among men and between 40.8% and 57.6% of the time among women. They suggest that

> while PTSD often occurs before other comorbid conditions, it usually occurs subsequent to at least one previous DSMIII-R disorder...this suggests that a complete assessment of lifetime PTSD would likely show both that it often occurs to people with a history and it is often associated with the subsequent onset of yet other disorders (p. 1055).

1.3.2.3.5. DURATION AND CHRONICITY OF PTSD

The chronicity of PTSD is well established. Kessler et al. (1995) consistently found that PTSD failed to remit in more than one third of persons even after many years and in those who received treatment. Breslau and Davis (1992) found that 57% of PTSD cases had a duration of more than one year. Davidson et al. (1991) established that PTSD became chronic in 46% of all cases. When Breslau et al. (1991) defined chronic PTSD as the duration of symptoms for at least 3 years, they found that the lifetime prevalence of chronic PTSD was 3.3%-1.3% in men and 4.7% in women.

1.3.3. ADJUSTMENT TO UNIVERSITY

In addition to assessing minor psychiatric morbidity (including PTSD), the specific focus of this study on a student sample necessitates an emphasis upon issues which may specifically effect the mental health of students in South Africa, such as adjustment to the social, academic and financial demands that university imposes. This review will focus exclusively upon issues related to South African universities and the University of Cape Town.

Adjustment to university may be difficult for students from many different backgrounds. However, it may be particularly difficult for those students who have been disadvantaged by an inferior school education, as well as those students who find the university environment culturally alienating, those who are studying in a second language and those facing financial and socio-economic difficulties.

Students who have been subjected to an inferior education under the apartheid system face particular stressors in trying to cope with the academic expectations of university. In the UCT Readmissions Review Committee report for the period 05/01/98-13/02/98 (Van der Merwe, 1998), it is stated that 31 of the 38 students (82%) who appealed to the readmissions committee completed their secondary education in schools which fell under the erstwhile Departments of Education and Training (DET), House of Representatives and House of Delegates.[16] The Readmissions Committee Assistance Officer who counselled and assisted students appealing against the decisions of the Readmissions Committee stated in her report for the period 13/01/97 - 14/03/97 that the students to whom she attended were mainly from educationally disadvantaged backgrounds (Goliath, 1997). Many of the students who were not readmitted on grounds of academic performance were struggling financially (Goliath, 1997). In counselling these students, the Readmissions Committee Assistance Officer became aware of their feelings of isolation and alienation at the university (Goliath, 1997).

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[16] *The Departments of Education and Training, House of Representatives and House of Delegates were, under apartheid, the education departments dealing with groups classified as 'Black, 'Coloured' and 'Indian' respectively.*

Research conducted in 1995 by the Equal Opportunity Research Project (EORP) into non-classroom related factors affecting academic performance at UCT (Hall, Rex & Sutherland, 1995) indicates that, overall, Black students tend to struggle academically relative to White students. The researchers attribute this pattern to a variety of factors including disadvantaged education (specifically DET and Transkei schools), less educated parents and speaking English as a second or third language. They indicate, also, that women achieve 'middle of the range' academic results (60-70%), whilst more men are at the top and bottom ends of the academic spectrum : 53% average below 60% and nearly 20% average over 70%. When both 'race' and gender are examined in relation to results the following patterns emerge:

> White men obtain more firsts and upper seconds than any other group, while 63% of Black men average below 60%. Half of the Black women in the sample average below 60% and more than half of the White women average 60% to 70% (p. 13).

Discrepancies between first and second or third language speakers' results are also highlighted; while 21% of English speakers average above 70%, only 3% of second language English speakers obtain the same level. Sixty-three percent of second language speakers average below 60%, in contrast to 40% of first language English speakers. Since 92% of the second language English speakers are Black, the disadvantage of studying in a second language affects mostly Black students' performances. A strong correlation was found to exist between students' educational background and their academic performance at UCT. Specifically, graduates of Black government schools perform less well than do students from white government or private schools. While 11% of the sample was made up of graduates of DET and Transkei schools, they comprise more than half of all failures in the sample. Hall et al. (1995) suggest that, for many students at UCT, effort expended and results obtained do not correlate. For instance, more Black students than White students make appointments to meet with lecturers, discuss ideas for assignments with lecturers and ask for feedback.

In the sample of students examined by the EORP (1995), most expressed positive perceptions of UCT. Seventy-nine percent reported that they feel that they belong to UCT. Hall et al. (1995) assert that the group most alienated from the institution are Black men - 'Black men students, in particular, appear least satisfied with their

experience at university, reporting high levels of frustration and alienation from the institution' (p. 42).

UCT has made a concerted effort to address the above-mentioned difficulties experienced by particular groups of students. In the 1997 Vice Chancellor's report (Ramphele, 1997), it is stated that financial aid for needy undergraduate students continues as a major priority. UCT's Academic Development Programme (ADP), in an attempt to address inequalities in South Africa's educational system, assists students from disadvantaged backgrounds to realize their academic potential.

1.3.4. SUBSTANCE ABUSE

In view of concerns expressed by MHP's at SHS and given the high incidence of the co-morbidity of various minor psychiatric disorders with substance abuse (see sections 1.3.2.3.4. and 1.3.4.1.3.), this research focuses also upon the prevalence of substance abuse amongst students attending the medical services of the SHS. A comprehensive review of literature on the area of substance abuse will not be conducted. This review focuses almost exclusively upon Southern African research relating directly to this study.

1.3.4.1. ALCOHOL

1.3.4.1.1. ALCOHOL PROBLEMS IN PRIMARY HEALTH CARE SETTINGS

Patients seeking general medical care frequently have a high rate of alcohol problems (Magruder-Habib, Durand & Frey, 1991; Nilssen & Cone, 1994). Cleary et al. (1988) suggest that 20% of adults visiting primary health care settings have experienced problems with alcohol at some time in their lives and Magruder-Habib et al. (1991) estimate the rate to be between 4 and 33%.

1.3.4.1.2. PREVALENCE OF ALCOHOL CONSUMPTION AND ABUSE AMONGST ADOLESCENTS AND YOUNG ADULTS IN SOUTH AFRICA

Recent studies have indicated high levels of alcohol consumption amongst youth in South Africa, and in the Cape Peninsula in particular. See Table 1.3. for prevalence rates of alcohol use and risky drinking amongst adolescents and young adults in South Africa (Table adapted from Parry & Bennetts, 1998, pp. 36-37).

Table 1.3. *Prevalence rates of alcohol use and risky drinking amongst adolescents and young adults in South Africa*

AUTHORS	SAMPLE	DEFINITION RISKY DRINKING	RECENT USE	PREVIOUS USE			RISKY DRINKING		
				TOT%	F%	M%	TOT%	F%	M%
Department of Education and Culture (1990)	white high school students (national) grades 11-12	drinking on 2 or more days per week					10.3		
Eide and Acuda (1995)	high school students (Zimbabwe) 12-21 yrs				33	41			
Epstein (1987)	current drinkers in grade 10 in 2 East London schools n=309	sometimes, nearly always or always get intoxicated when you drink					20		
Flisher, Ziervogel, Chalton, Leger and Robertson (1993a)	high school students in Cape Peninsula grades 8-12 n=7340	5 or more drinks on one or more occasion in past 14 days	26.2					Afrikaans 10.2 English 14.7 Xhosa 5	Afrikaans 15.4 English 26.9 Xhosa 24
Meursing and Morojele (1989)	high school students in Lesotho 11-22 yrs			46	54	41			
Morojele, Ziervogel, Parry and Robertson (1997)*	3 high schools in Cape Peninsula n=497 Grade 10	had 5 or more drinks at least once in past 14 days						Black 3.6 Coloured 25 White 18.4	Black 35.6 Coloured 26.3 White 39
Nkhoma and Maforah (1994)	UCT students n=71 91% black students	drinking throughout the weekend once a month					28.3		
Parry, Tibbs, Cummins, Brice, Angellos, Thompson, Stretch and Stoppel (1994)	high school students in greater Cape Town n=340 12-18yrs	5 or more drinks at least once in past 14 days		83			23		92% of binge drinkers were male
Parry et al. (1994)	UCT students n=372 18-25yrs	5 or more drinks at least once in past 14 days		93			49	59	38

* In Parry and Bennetts (1998)

Key
Tot % = total %
F% = % of females
M% = % of males

With reference to Table 1.3., Eide and Acuda (1995) found that white male adolescents, and adolescents from higher socio-economic groups were found to be most likely to drink alcohol. Parry et al. (1994) in their study of UCT students found that white students were the most likely and Coloured students the least likely to become heavy drinkers. Most students reported drinking at social events. In a study of drinking patterns amongst students in a university self-catering residence at the University of Cape Town, Nkhoma and Maforah (1994) found that, of the 71 respondents (91% of whom were Black students, 7% Coloured students and 2% Indian students), 74.7% were drinkers. 54.7% drank on Friday nights and Saturdays and 26.4% drank throughout the weekend (Friday, Saturday and Sunday). One respondent drank throughout the week. 50.9% drank at least 4 times a month and 18.9% drank 2-3 times a week. Almost 58% of the respondents believed that alcohol consumption amongst students in residence is excessive. 18.9% of the sample had been advised to stop drinking and 26.4% had failed to honour responsibilities as a consequence of alcohol consumption.

Research undertaken in the United States (Baer, Kivlahan & Marlatt, 1995; Wechsler, Isaac, Grodstein & Sellers, 1994; Wechsler, Dowdall, Davenport & Castillo, 1995) suggests that binge drinking during high school is strongly predictive of binge drinking in college (university).

A number of studies on alcohol consumption and abuse amongst adults in South Africa have been conducted (e.g. Gatley, 1989; Myrdal & Potgieter, 1992; Rocha-Silva, 1989; Rocha-Silva, 1991a; 1991b; Yach & Joubert, 1988) but are not directly related to the sample being studied in this research. For international research on drinking amongst university students and young adults see Crowley (1991), Donovan, Jessor and Jessor (1983), Engs (1977, 1990), Hanson and Engs (1992), Harford, Wechsler and Rohman (1983), Igra and Moos (1979), MacDonald, Fleming and Barry (1991), Nezlek, Pilkington and Bilbro (1994), O'Hare (1990), Sharp and Lowe (1989), Wechsler, Davenport, Dowdall, Moeykens and Castillo (1994), Wechsler, Dowdall, Davenport and Rimm (1995).

1.3.4.1.3. ALCOHOL ABUSE AND CO-MORBIDITY

Based upon epidemiological research in the United States, Helzer and Pryzbeck (1988) report that 'alcoholics' are 3.9 times as likely as 'non-alcoholics' to engage in drug abuse and 1.7 times as likely to suffer from depression. Similarly, Camatta and Nagoshi (1995), Deykin, Levy and Wells (1987) and Kushner and Sher (1993) indicate that heavy drinking amongst college students in the United States is associated with MPM (depression and/or anxiety in particular). Patel et al. (1997), however, in research done in Zimbabwe found that alcohol use was not associated with psychiatric caseness.

1.3.4.2. ILLICIT DRUGS

Few epidemiological studies on drug abuse have been conducted in South Africa. Flisher et al. (1993b), in their study of high-school students in the Cape Peninsula, found that drug use mainly involved cannabis (7.5% lifetime use and 2.4% in the previous 7 days) and solvents (10.9% lifetime use and 2.6% in the previous 7 days). 1.6% had ever smoked methaqualone (mandrax) and less than 1% reported recent use. 0.5% reported lifetime use of injectable drugs with 0.2% having used injectable drugs recently. Overall, males reported greater drug use than did females, usage increased with age and Xhosa speaking males reported greater current drug use than other subgroups. Xhosa speaking females reported the lowest lifetime and current use of illicit drugs. With the exception of Xhosa speaking males, Flisher et al. (1993b) came to the conclusion that the consistently large disparity between lifetime and recent use is indicative that, for the majority of Cape Peninsula adolescents, drug usage is generally of a temporary and experimental nature.

Rocha-Silva, De Miranda and Erasmus (1996) undertook a national study of alcohol and drug use among Black youth (10-21 years). 5.5% of the sample (n=1378) admitted to currently using cannabis - this usage was restricted to males in urban areas. 1.5% of the sample admitted to using LSD within the last 12 months, 1.7% for Mandrax, 0.8% for Cocaine, 0.9% for heroine and 2.9% for Steroids.

Rocha-Silva (1991b) reported that, amongst Black adults in metropolitan areas, current use of substances other than alcohol was significantly higher for males than for females. 5.3%, 3.3% and 2.4% of males were current users of cannabis, LSD

and cocaine respectively. The percentages of female users of these substances was negligible.

1.3.4.3. EFFECTS OF SUBSTANCE ABUSE ON ACADEMIC PERFORMANCE

This area has been inadequately studied in South Africa (Parry, 1997). However, in a study in the United States, Yamada, Kendix and Yamada (1996) found that frequent alcohol consumption and cannabis use significantly reduced the probability of high school graduation. Nystrom, Perasalo and Salaspuro (1993) state, moreover, that 'alcohol-related problems often constitute a major reason why university studies are discontinued or considerably delayed' (p. 528).

1.3.5. STUDENT MENTAL HEALTH SERVICES

Although this research is focused specifically upon the UCT SHS, its results may have implications for the mental health services rendered to students at UCT as a whole. This section will briefly examine the role of student mental health services and will then outline the mental health services available to students at UCT.

Arnstein (1990) suggests that student mental health facilities should offer a range of therapeutic, educative and consultative services. He recommends that the following services are provided:-

1) Offering counselling/psychotherapy to students who seek it for symptom relief or developmental problems.
2) More general counselling services related to careers, study habits etc.
3) Evaluation of students' emotional states and referral elsewhere for treatment
4) The provision of training, consultation and supervision for university staff.
5) The provision of health education programs related to emotional problems.
6) The offering of liaison and support to peer counselling services.
7) Providing evaluations of students for administrative purposes such as disciplinary hearings or readmission.
8) Consultation to the university administration regarding policy matters related to mental health issues.
9) As an agent of change with regards to campus conditions.

See appendix 18 for information on mental health services offered to students at other universities.

1.3.5.1. MENTAL HEALTH SERVICES FOR STUDENTS AT UCT

Mental health and/or counselling services are currently offered by the SHS, the Child Guidance Clinic, the Careers Office, the Student Advice Bureau and the Sexual Harassment Prevention and Support Service (SHARPSS). (For the methods by which this information was obtained, see Chapter 2, section 2.5.).

The SHS is located on the Protem campus and offers short term counselling on an appointment basis. Students who are not on financial aid are charged rates in accordance with the Representative Association of Medical Aid Schemes (see Chapter 2, section 2.3.). During 1997, and to a lesser extent in 1998, the SHS embarked upon a campaign to reduce alcohol use and abuse on campus. The Child Guidance Clinic, located near the residences on lower campus, is a teaching and training environment for Masters students in Clinical Psychology and offers students short and medium term therapy. There is a waiting list and services are charged for on a sliding scale. The UCT Careers Office on middle campus offers career advice and guidance, by appointment and free of charge, to registered students. The Student Advice Bureau is located on Upper Campus. It employs two full time clinical social workers who offer free short term counselling on a walk in and wait basis. Counselling offered by the Student Advice Bureau was initially structured as a way to assist disadvantaged students in their adjustment to UCT. Counselling services here have since been broadened and deal with a range of emotional issues. One of the clinical social workers is also aligned to the Sexual Harassment Prevention and Support Service and is responsible for providing related counselling and support.

UCT currently has no unified policy relating to students' mental health. Approximately 10 years ago, a Student Counselling Co-ordinating Committee (SCCC) was formed. This was a formal sub-committee of the Student Affairs Committee and had a wide variety of stakeholders (e.g. residence wardens, faculty officers, representatives of the SHS and Careers Office). Due to time pressures of committee members, as well as budgetary constraints, this committee was disbanded about 2 years ago. It laid the groundwork, however, for the Student Development and Services Department

(SDSD), headed by a Dean of Students, at the end of 1998 (see Chapter 4, section 4.3.1.). (Director of SHS, personal communication, February 15 1999).

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Having reviewed, with particular stated foci, the literature relevant to this study, using Goldberg and Huxley's (1980) 'pathway to psychiatric care' as a guiding framework, it is evident that the decision to consult, the nature of the presentation of illness and detection of MPM by medical practitioners cannot be taken for granted. This applies equally to the emotional effects of exposure to civilian trauma (which the literature suggests is significant in South Africa) and to substance abuse. Literature on co-morbidity indicates that depression, anxiety, PTSD and substance abuse are likely to co-exist. The context of this study in a SHS in South Africa necessitates a focus upon issues related to adjustment to university and student mental health services.

Given this review of the literature, the objectives of this study are summarized below.

1.4. RESEARCH OBJECTIVES

This study has the following aims:-

1. to screen for the prevalence of possible MPM amongst students attending the SHS at UCT.
2. to estimate the prevalence of the experience of crime and non-crime civilian traumatic events amongst students attending the SHS at UCT.
3. to assess the prevalence of symptoms of PTSD in students attending the SHS at UCT.
4. to examine the adjustment to university amongst students attending the SHS at UCT.
5. to estimate the frequency and extent of substance abuse (alcohol and drugs) amongst students attending the SHS at UCT.
6. to assess the extent to which clinical staff (nurses and doctors) detect psychiatric morbidity amongst students attending the SHS at UCT and to examine the nature of treatment and referral patterns of students so identified.
7. to assess the implications of this study to mental health services for students at UCT as a whole.

CHAPTER 2: METHOD

2.1. POPULATION AND SAMPLING

A consecutive sample of students (N = 515) attending the general health services of the SHS at UCT on weekdays between May 26 1998 and June 11 1998 inclusive was screened. All the participants were registered students at UCT. Excluded from screening were patients who were too ill to fill in a questionnaire, who needed emergency medical attention, who were repeat attenders (i.e. had already attended once during the time the research was being conducted and had thus been screened), those who refused to participate and those who had appointments with mental health practitioners .

A breakdown of patients attending the SHS on weekdays in the period from May 26 1998 to June 11 1998 is outlined in table 2.1.

Table 2.1. *A breakdown of patients attending the SHS from May 26 to June 11 1998*

DATE	DOCTORS*	NURSES*	TOTAL	TOTAL LESS REPEATS
May 26	22	37	59	59
May 27	16	23	39	39
May 28	21	43	64	61
May 29	24	41	65	59
June 1	10	37	47	39
June 2	12	36	48	42
June 3	11	33	44	35
June 4	21	32	53	45
June 5	18	44	62	43
June 8	22	42	64	51
June 9	16	5	21	10
June 10	15	43	58	45
June 11	20	29	49	31
Total	228	446	673	559

** see section 2.3. for an outline of staffing arrangements at the SHS*

2.1.1. ACCOUNTING FOR MISSING QUESTIONNAIRES:-

Table 2.2. outlines the reasons for the non-completion of 44 questionnaires.

Table 2.2. *Reasons for non-completion of 44 questionnaires*

NUMBER OF MISSED QUESTIONNAIRES	REASONS FOR NON-COMPLETION
19	left SHS without returning questionnaire or missed by TG
11	medical emergency/too ill
7	spoilt or inadequately completed questionnaires
2	hand injuries
2	refusals
1	disorientation
1	unable to write because of neck brace
1	poor eyesight
Total = 44	

The medical personnel (doctors and nurses) who attended to the individual participants were also asked to fill in a questionnaire (see section 2.4.). These were all practitioners (full-time and part-time) employed by the UCT SHS.

2.1.2. CALCULATION OF SAMPLE SIZE

The sample size was calculated in accordance with an expected point prevalence of MPM of 20%. This point prevalence was chosen since it roughly represents a mid-point of prevalence estimates of MPM found in clinic studies in developing countries (see section 1.3.1.2.3.) In order to obtain at least 100 patients with MPM, a sample size of approximately 500 was required.

2.2. RESEARCH DESIGN

This was a cross-sectional study of students attending the general medical services of the SHS at UCT. Students were screened to estimate the point prevalence of probable cases of MPM, the prevalence of exposure to crime and non-crime civilian traumatic events, the prevalence of symptoms of PTSD, adjustment to university and the extent and nature of substance abuse. Given the pilot nature of this study, a second stage case identifying method was not utilized. Information on the detection of MPM, together with referral patterns was also obtained from medical personnel attending to the student sample.

2.3. SITE

The study took place at the UCT SHS which is situated on the Protem campus. The SHS is open from 08h30 to 12h30 and from 13h30 to 16h30 on weekdays. The SHS is staffed by doctors, nursing sisters, psychologists, social workers, a psychiatrist and support staff. One full-time doctor is also the director of the service. The service employs one other full time doctor and 2 half time doctors. The SHS

also employs 3 full time nurses, 2 sessional nurses and 2 nurses on standby, 1 half time psychologist, 4 sessional psychologists/social workers, 1 sessional psychiatrist and 5 secretarial and administrative staff. Consultations with nurses are free of charge whereas doctors and psychologists charge rates in accordance with the Representative Association of Medical Schemes. Students on financial aid are seen free of charge.

2.4. INSTRUMENTS

2.4.1. STUDENT QUESTIONNAIRE

A questionnaire including the Self Reporting Questionnaire (SRQ) (see section 2.4.1.1.), questions assessing the prevalence of exposure to crime and non-crime civilian traumatic events (see section 2.4.1.2.), the prevalence of symptoms of Posttraumatic Stress Disorder (see section 2.4.1.2.), the frequency and extent of substance abuse (see section 2.4.1.3.), as well as adjustment to university (see section 2.4.1.5.), socio-demographic and other details (see sections 2.4.1.6; 2.4.1.4.; 2.4.1.7.), was administered to the student sample.[17]

2.4.1.1. THE SELF REPORTING QUESTIONNAIRE (SRQ20; SRQ25) [18]

The SRQ is a 20 or 25 point, easily administered instrument with a binomial response format that was developed to screen for MPM in primary health settings in developing countries (Harding et al., 1983). A respondent is considered to be a potential psychiatric case if the total number of 'yes' answers to the first 20 questions (the 'non-psychotic' or 'neurotic' items) reaches or surpasses a fixed value (cut off point), if at least one 'yes' answer is given for the last 5 questions (the 'psychotic items' and 1 item asking about convulsions) or if both criteria are met. Each of the items is scored 0 or 1 - one for an affirmative answer and 0 for a negative answer. The maximum score is therefore 20 (for SRQ20) or 25 (for SRQ25).

[17] *See appendix 5*
[18] *See section 2 of appendix 5*

The SRQ was developed as part of the WHO collaborative study on strategies for extending mental health care which started in 1975 (Harding et al., 1983). The first 20 items (the SRQ20) were selected from 4 instruments used in a variety of cultural settings: the Patient Self-Report Symptom Form (PASSR), an instrument developed and tested in Colombia (Climent & Plutchick, 1980 in Harding et al., 1980); the PGI Health Questionnaire developed by Wig and colleagues in Chandigarh, India (Verma & Wig, 1977 in Harding et al., 1980); The General Health Questionnaire (GHQ) used by Goldberg in England and later validated in the United States (Goldberg, 1972 in Harding et al., 1980) and other settings and the 'symptom' items on the shortened version of the Present State Examination (PSE) (Wing et al., 1974 in Harding et al., 1980). The 4 'psychotic' items were based on the items in Foulds' Symptom Sign Inventory (Foulds & Hope, 1968 in Harding et al., 1980). There is also a question asking about fits/convulsions (together constituting the SRQ25).

The SRQ has been used in many studies in developing countries, including Colombia, India, the Philippines and Sudan (Harding et al., 1980), Brazil (Mari & Williams, 1985), Guine-Bissau (De Jong et al., 1986), Kenya (Dhadphale et al., 1982, 1983), Senegal (Diop et al., 1982), Ethiopia (Kortmann & Ten Horn, 1988), Zimbabwe (Hall & Williams, 1987), Colombia (Lima, Chavez, Samaniego & Pai, 1992), India (Sen, 1987), Sudan (Rahim & Cederblad, 1989) and South Africa (Bhagwanjee et al., 1998; Freeman et al., 1991; Petersen et al., 1996; Rumble, 1994; Thom et al., 1993).

The SRQ is a screening instrument, designed to identify possible cases of MPM. Psychiatric status needs to be confirmed by the use of a more extensive psychiatric interview (gold standard or second stage criterion) (Beusenberg & Orley, 1994).

2.4.1.1.1. VALIDITY OF THE SRQ

a. Criterion Validity

This is assessed by determining the relationship of the scale with a clinical assessment by a trained investigator using a structured research interview (i.e. a 'gold standard') (Beusenberg & Orley, 1994). This may either be done by measuring the correlation between the SRQ and the criterion (the higher the correlation between the scores, the higher the criterion validity) or by the use of validity indices like *sensitivity*, *specificity* and *overall misclassification rate*

(Beusenberg & Orley, 1994). These indices indicate how well the results of the SRQ match the results from the 'gold standard' (this is based upon the underlying assumption that the psychiatric assessment of the 'gold standard' is correct).

• *Sensitivity*:- This is a measure of the screening instrument's (the SRQ) ability to detect true cases of psychiatric morbidity (as identified by the criterion instrument). A sensitivity of 100% means that the screening instrument detects all true cases of psychiatric morbidity. A high sensitivity, therefore, indicates a low false positive rate.

•*Specificity*:- This is a measure of the screening instrument's ability to detect the true non-cases of psychiatric morbidity (or 'true normals') (as identified by the criterion instrument). A specificity of 100% means that the screening instrument detects all true non-cases of psychiatric morbidity. A high specificity, therefore, indicates a low false negative rate.

Sensitivity and specificity of a screening instrument will vary in accordance with the *cut-off point* chosen to distinguish a probable case from a probable non-case. The choice of a cut-off value involves a compromise between sensitivity and specificity; increasing sensitivity causes a decrease in specificity and vice versa (Beusenberg & Orley, 1994).

•*Overall Misclassification Rate*:- the proportion of respondents who are not correctly assessed.

Since this is a pilot study which is not utilizing a second-stage criterion, validity estimates of the SRQ will be based upon those established in other studies. Perhaps the most likely study to refer to in this case is that of Rumble (1994) who, in her study of the prevalence of psychiatric morbidity in the adult population of Mamre, undertook the most recent validation of the SRQ in the Western Cape in South Africa. It should be noted, however, that Rumble's (1994) was a community study whereas this study is being conducted in a clinic setting. Rumble (1994) arrived at a sensitivity coefficient of 49% and a specificity coefficient of 82% (coefficients weighted back to original sample). This is indicative of a high false positive rate and a low false negative rate.

Table 2.3. indicates validity coefficients arrived at from research using the SRQ in other developing countries:- (Table adapted from Beusenberg & Orley, 1994, p. 18)

Table 2.3.[19] *Validity coefficients of the SRQ in developing countries*

Author(s) & Year	Country	Cut-off	Sensitivity	Specificity	Misclassification Rate
Araya, Wynn and Lewis (1992)	Chile (clinic)	9|10	74%	77%	25%
Bhagwanjee et al. (1998)	South Africa (community)	8	93.9% 54.4% *	62.5% 95.6% *	18%
Dhadphale et al. (1982)	Kenya (clinic)	7|8	89.7%	95.2%	not mentioned
Deshpande, Sundaram and Wig (1989)	India (clinic)	8|9	62.9%	62%	not mentioned
El-Rufaie and Absood (1994)	United Arab Emirates (clinic)	5|6	78.3%	75.2%	24%
Harding et al. (1980)	4 developing countries (clinic)	3-11	73%-83%	72%-85%	18%-24%
Kortmann and Ten Horn (1988) 'psychiatric' group 'somatic' group 'control' group **	Ethiopia (combined)	8|9	77% 63% 0%	44% 68% 100%	30% 33% 12%
Mari and Williams (1985)	Brazil (clinic)	7|8	83% *	80% *	18%
Penayo, Kullgren and Caldera (1990)	Nicaragua (combined)	7|8	81%	58%	not mentioned
Petersen et al. (1996)	South Africa (community)	8	93.9% 54.37 *	62.5% 95.55 *	not mentioned
Rumble (1994)	South Africa (community)	7|8	71% 49% *	65% 82% *	33%
Sen (1987)	India (clinic)	11|12	79% *	75% *	23%

** Coefficients weighted back to the original sample. It should be noted that comparison of validity coefficients may be inappropriate as few studies weight their coefficients back to the original sample (Rumble et al., 1996). In a 2 stage study, failure to use weighting techniques will lead to inaccurate validity indices and prevalence figures (Beusenberg & Orley, 1994). For more information on weighting techniques see Beusenberg and Orley (1994) and Rumble (1994).*
*** Figures for the total sample are not available. The study was conducted in an outpatient department of a hospital. Patients who are appointed to one of the somatic clinics constitute the 'somatic' group (n=40); patients referred to the psychiatric clinic constitute the 'psychiatric' group (n=30). A sample from the Addis Ababa (Ethiopia) community is called the 'control' group (n=40).*

[19] *Studies which are mentioned frequently in this dissertation but do not appear in this table (e.g. Hall & Williams, 1987; De Jong et al., 1986; Diop et al., 1982; Freeman et al., 1991) provided no information on validity coefficients.*

b. Content Validity

This involves 'a judgement of whether the instrument samples all the relevant or important content or domains' (Beusenberg & Orley, 1994, p.12). Beusenberg and Orley (1994) assert that the SRQ has high content validity in its coverage of 'neurotic' disorders (anxiety, depression and somatoform disorders). They note that

> at first sight, there is no question in the SRQ related to obsessive-compulsive disorders, but since individuals with obsessive-compulsive disorders often have depressive and anxiety symptoms, this form of disorder may be detected by the instrument. (Beusenberg & Orley, 1994, p.12)

2.4.1.1.2. RELIABILITY OF THE SRQ

a. Inter-rater reliability:- This depends upon whether consistent results are produced between interviewers. This did not arise as an issue in this study because the schedule was not interviewer administered (see section 2.5.).

b. Internal consistency:- there is little available research on the internal consistency of the SRQ. Iacoponi and Mari (1989, cited in Beusenberg & Orley, 1994) measured internal consistency of the Portuguese version of the SRQ. A satisfactory coefficient of 0.81 was obtained. Tafari et al. (1991, cited in Beusenberg & Orley, 1994) found an average inter-item correlation of 0.4, thus demonstrating an acceptable degree of internal consistency.

c. Test-retest reliability:- there is a paucity of research in this area, mainly owing to the fact that, because the SRQ measures mental health status, which changes over time, interpretation difficulties would arise from estimates of test-retest reliability. Distinction between change in mental health status and unreliability of the test would be difficult (Beusenberg & Orley, 1994).

2.4.1.2. QUESTIONS ASSESSING EXPOSURE TO VIOLENT CRIME AND NON-CRIME CIVILIAN TRAUMATIC EVENTS, TOGETHER WITH SYMPTOMS OF POSTTRAUMATIC STRESS DISORDER.

This part of the questionnaire (section 3) was based upon the DSMIII-R (American Psychiatric Association, 1987) and DSMIV (American Psychiatric Association, 1994) diagnostic criteria for PTSD.[20] The literature on PTSD was also consulted.

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[20] *See appendix 3*

Regarding the definition of a traumatic event, cognisance was taken of the debate surrounding the utility of only assessing PTSD for events that involve 'actual or threatened death or serious injury, or a threat to the physical integrity of self or others' (American Psychiatric Association, 1994, p. 427). It is suggested by some authors (e.g. Davidson & Foa, 1991) that events of lesser magnitude may give rise to PTSD symptoms (see section 1.3.2.3.1.). The clinical staff working at the SHS felt that students were experiencing traumatic events which might not necessarily be life-threatening and suffering the emotional consequences of these. Therefore, in assessing exposure to traumatic events, a question allowing a fairly broad interpretation of trauma was included - '*Have you witnessed or experienced any situation that was frightening or traumatic or where you felt that your life, or that of someone else, was in danger?*'. Participants were classified as meeting Criterion A for PTSD if they answered yes to this question.

The nature of this traumatic event was assessed by providing participants with 6 options from which to choose : threat, beating, knife attack, shooting, sexual assault and other.

The duration of symptoms was loosely assessed by a question asking when the traumatic event occurred. Note, however, that this does not accurately assess duration of symptoms, but rather length of time since the traumatic event occurred. (see section 4.2.8.1.2.).

Details regarding the location of the traumatic event were gained by asking participants to choose from 5 location categories: home, UCT campus, UCT residence, neighbourhood and other.

Thirteen 'symptom' questions were then asked, based upon DSMIV (American Psychiatric Association, 1994) criteria B, C and D, using a binomial response format. Where items from the DSMIV (American Psychiatric Association, 1994) classification for PTSD have already been asked in the SRQ, these questions were not repeated in section 3 of the questionnaire (i.e. questions 3 and 11 in the SRQ).

They were, however, used in scoring.[21] Note that in this questionnaire, DSMIV (American Psychiatric Association, 1994) criteria B4 and B5 are combined, as are criteria D4 and D5.[22]

A positive PTSD diagnosis was assigned if a respondent met DSMIV (American Psychiatric Association, 1994) criteria by having the necessary number of PTSD Criterion B, C and D symptoms (one, three and two respectively).

2.4.1.3. QUESTIONS ASSESSING THE FREQUENCY AND EXTENT OF SUBSTANCE ABUSE

The questions in section 4 were based loosely upon some of the questions from various alcohol screening tests used with patients in primary health care settings, including those developed by McMenamin (1994), the CAGE (Mayfield, McLeod & Hall, 1974) and the Alcohol Misuse Screening Questionnaire (Parry, 1994).

The frequency of alcohol consumption, together with that of 'binge-drinking' (5 or more drinks at a time), 'problem drinking' (spending most of one's waking time drinking) and the effects of drinking are assessed. Questions about the frequency and extent of cannabis consumption and other drugs are included.

2.4.1.4. QUESTIONS ASSESSING PREVIOUS CONSULTATION(S) WITH MENTAL HEALTH PROFESSIONALS

Section 5 of the questionnaire was designed to ascertain whether students had previously consulted mental health professionals and whether this consultation had occurred at the UCT SHS or elsewhere.

2.4.1.5. QUESTIONS ASSESSING ADJUSTMENT TO UNIVERSITY

Questions 6,7,8,9 and 10 in Section 1 of the students' questionnaire were designed to assess the students' sense of adjustment at UCT and their subjective sense of coping both academically and financially.

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[21] *See Chapter 3, section 3.4.6.*

[22] *See Appendix 6 for a table showing the relationship between DSMIV (American Psychiatric Association, 1994) criteria and questionnaire items.*

2.4.1.6. DEMOGRAPHIC DETAILS

Students' gender [23], 'race', age and place of origin are ascertained in Section 1 (questions 1,2,3,4) of the questionnaire.

2.4.1.7. STUDENTS' REPORTED REASONS FOR ATTENDING SHS

Question 11 of section 1 was designed to obtain information on participants' understanding of their reasons for attending the SHS.

2.4.1.8. VALIDITY AND RELIABILITY OF STUDENT QUESTIONNAIRE SECTIONS 1,3,4,5.

Since the questions in sections 1,3,4 & 5 of the Student Questionnaire were compiled specifically for the purposes of this research, little information on validity and reliability is available. Although this is potentially a limitation, it is not specific to this particular research and does not imply that information obtained from the questions should be discarded. Moreover, most of the questions in sections 1,3,4 & 5 are not measurement devices. This reduces the significance of concepts related to validity and reliability.

2.4.1.8.1. VALIDITY

a) Construct validity of questions assessing PTSD

The construct validity of these questions remains questionable in so far as the construct of PTSD itself, as a diagnostic category, is debatable. See Chapter 1, section 1.3.2.3.4., Chapter 3, section 3.4.6. and Chapter 4, section 4.2.8.4.

b) Construct validity of questions on substance abuse

This depends upon the validity of definitions of 'risky drinking' (e.g. whether, in fact, drinking more than 5 drinks on one occasion constitutes 'risky drinking').

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[23] *The publication manual of the American Psychological Association (1994) states that 'gender' is cultural and is the term used when referring to men and women as social groups. 'Sex' is biological and its use would probably be more strictly accurate in the context of this study. However, as the publication manual of the American Psychological Association (1994) points out, 'sex' can be confused with sexual behaviour whereas 'gender' helps keep meaning unambiguous.*

2.4.1.8.2. RELIABILITY

a) Test-retest reliability

The test-retest reliability of the questions in sections 1,3,4 & 5 has not been measured. This is partly a result of the fact that this research has not been replicated, but also for reasons outlined in section 2.4.1.1.2 (c).

b) Internal Consistency

The concept of internal consistency does not apply to all the questions in sections 1.3.4.& 5 since many ask for information and are not measurement devices. However, the questions on PTSD could conceivably be tested for internal consistency.

2.4.2. PRACTITIONER QUESTIONNAIRE [24]

A brief questionnaire was administered to clinical staff (nurses and doctors) attending to the student sample. For each patient seen, the practitioner was required to complete 4 different categories of questions:

2.4.2.1. THE HEALTH STAFF RATING SCHEDULE (HSR)

This schedule consists of 4-5 yes/no questions and has been used by de Jong et al. (1986), Hall and Williams (1987) and others. The practitioner marks one of five items: I think this patient has 1) a physical health problem only; 2) a mental health problem only; 3) a physical and mental health problem; 4) no health problem of any kind, 5) no rating possible. The HSR takes a few seconds per patient to complete.

2.4.2.2. QUESTIONS ON INFORMATION LEADING TO DIAGNOSIS

Practitioners were asked whether their judgment on the HSR was based upon the current consultation alone, previous knowledge about the patient or a combination of the above.

2.4.2.3. DIAGNOSIS

Practitioners were asked to record their diagnosis/diagnoses.

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[24] *See appendix 7*

2.4.2.4. QUESTIONS ON REFERRAL

This section includes questions on referrals and desired referrals.

2.5. INFORMATION ON MENTAL HEALTH SERVICES FOR STUDENTS AT UCT

Information on mental health services for students at UCT was obtained via interviews with known facilties offering mental health services for students (e.g. the Student Advice Bureau. (Personal communication with clinical social worker, January 16, 1999), the UCT homepage on the World Wide Web (http://www.uct.ac.za) and a telephone call to the Director of the SHS (pesonal communication, February 15, 1999).

2.6. DATA COLLECTION

On the weekdays between May 25 and June 11, the questionnaires were distributed to all students attending the SHS from 08h30 to 16h30. The questionnaires were distributed and collected by TG. TG was present at all times and was available to deal with problems and queries. Participation was voluntary. Students consulting MHP's were not administered questionnaires. Students were assured of confidentiality and were asked to sign consent for their confidential medical folders to be consulted by TG. Of the 515 students, 391 consented to this and 90 refused consent. TG filled in the file numbers of the students on the questionnaire before presenting it to the student. Based upon an assumption of adequate reading and writing skills, the questionnaires were self-administered. The entire questionnaire was compiled in English. Since UCT is an English medium university and all academic courses are conducted exclusively in English, it was assumed that students attending the SHS would be competent in English. The entire questionnaire took 10-15 minutes to complete and this was done in the waiting room either prior to or after consultation with a medical practitioner.

The practitioners' questionnaire was inserted and removed from the relevant medical folder by TG, who also filled in the appropriate file number. This questionnaire was printed on coloured paper to facilitate easy recognition by the practitioner.

2.7. ETHICAL CONSIDERATIONS

This study was reviewed and approved by the University of Cape Town Psychology Department's ethics committee. The researcher (TG) is bound by confidentiality clauses she had signed at the UCT Child Guidance Clinic as part of her training in clinical psychology. Students, as previously mentioned, could give consent for their confidential medical folders to be consulted. If this consent was not given, the questionnaires remained completely anonymous.

Permission to undertake the study was obtained from the Director of the Student Health Service [25]. A brief proposal and copies of the questionnaires were presented to the staff of the SHS for their input and approval.

2.8. METHODS OF ANALYSIS

Sociodemographic characteristics of the sample, the point prevalence of possible MPM, the prevalence of exposure to traumatic events and of posttraumatic stress disorder and the frequency and extent of substance abuse are analysed using descriptive statistics. Thereafter, chi-square tests (χ^2) are used to determine the statistical significance of associations between variables of interest. Where the results are significant, the degree of relationship is assessed using measures of association (phi {ϕ} and odds ratios for 2x2 tables and Cramer's phi/v {ϕ_c} for larger contingency tables) (Howell, 1992). For larger contingency tables, analysis of standardized residuals enable the judgement of the post-hoc significance of the departure from independence in individual cells (Hays, 1991).[26, 27]

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[25] *See appendix 8*

[26] *Standardized residuals are Z scores calculated by subtracting expected frequency from observed frequency and dividing the outcome by the square root of the expected frequency (see Hays, 1991, p.860)*

[27] *See Appendix 9 for relevant χ^2 contingency tables and tables of standardized residuals*

The statistical tests chosen for this analysis were nonparametric, even though the total scores for the SRQ20 are distributed continuously. It is well established, moreover, that parametric inferential procedures are more powerful than nonparametric procedures; with non-parametric tests the result is less likely to be statistically significant when there is a relationship between 2 or more variables (Cramer, 1998).

The data for the total scores of the SRQ20, however, dramatically violate the requirements for parametric procedures. They are significantly asymmetrically distributed [28]. Transformation (e.g. by taking the square root or the logarithm of the scores) of the data in order to normalize the distribution proved difficult because of the large number of zero scores. When parametric tests were run comparing variables such as the total scores for SRQ20 and subjective sense of adjustment to UCT, the variances were not homogenous, thus violating another requirement for parametric tests.

Some authors (e.g. Boneau, 1960; Box, 1953) have argued that the violation of these 2 assumptions generally has little effect on the values of parametric tests (the F and t tests in particular). However Boneau (1960) argues that, although these tests remain robust despite violations of the assumptions of homogeneity of variance and normality of the underlying distributions, this robustness is compromised when the sample sizes differ - 'a combination of unequal sample sizes and unequal variances...automatically produces inaccurate probability statements...one must in this case resort to different testing procedures' (p. 62). In many of the parametric tests run on the data for this study, the variances were heterogeneous and the sample sizes different, thus necessitating the use of non-parametric procedures. By categorising SRQ20 total scores into groups above and below chosen points, however, intracategory differences between the individual scores are ignored. (see Chapter 3, section 3.3.1.).

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[28] *To determine whether the distribution is significantly asymmetrical, the value of skewness is divided by the standard error of skewness and the resulting value looked up in the table of the Standard Normal Distribution (Cramer, 1998). For the SRQ20 total scores, skewness = 0.82 and standard error of skewness = 0.11.*

With nonparametric tests (in this study the Pearson χ^2 test in particular), there are various assumptions/conventions that need to be fulfilled, namely that:

* each observation is independent of each other observation
* each observation qualifies for only one cell in the table
* there is a minimum expected frequency of 5 required in each cell for tables with more than a single degree of freedom . When there is only a single degree of freedom, a minimum expected frequency of 10 is safer (Hays, 1991). Hays (1991) argues that this is a fairly conservative convention and suggests that

> if the number of degrees of freedom is large, it is fairly safe to use the Pearson chi-square test for association even if the minimum expected frequency is as small as one, provided that there are only a few cells with small expected frequencies (such as one of five [i.e. 20%] or fewer).(p. 863).

2.9. CONTROLLING FOR TYPE ONE ERRORS

A major issue in conducting multiple comparison procedures is the probability of Type I errors (i.e. rejecting the null hypothesis when it is in fact true. The probability of a Type I error is designated as α, the size of the rejection region) (Howell, 1992). After arriving at a family or set of conclusions, the probability that this set of conclusions will contain at least one Type I error is called the familywise error rate (FW).

In this research, a number of factors assist in controlling the FW, namely:-

1) the reporting of exact P values

2) the use of a large sample which is likely to estimate effects more accurately

3) the implementation of the Bonferroni correction. This is based upon the Bonferroni inequality which states that the probability of the occurrence of one or more events can never exceed the sum of their individual probabilities. Thus, the probability of a Type I error for each comparison can be established by dividing a chosen FW (α') by the number of comparisons. P levels for each comparison are then tested for significance against the established figure (Howell, 1992).

In this study, only the 'main comparisons' (i.e. all comparisons besides standardized residuals) will be tested for significance using the Bonferroni Correction. With a total of 302 comparisons (including standardized residuals) and using a FW error rate of 5%, the threshold level of significance is 0.0002. It may be assumed, therefore, that amongst the significant 'main comparisons' there is a 5% probability that at least one Type I error has occurred.

For standardized residuals, an α of 0.05 will be used. The rationale behind this decision is based on the fact that, as a consequence of less power, standardized residuals are unlikely to reach a significance level of less than 0.0002. Statistical power depends partly upon sample size (Howell, 1992). Since standardized residuals are based upon comparisons between single cells of larger contingency tables they are generally based, also, upon smaller sample sizes.

CHAPTER 3: RESULTS [29, 30, 31]

3.1. RESPONSE RATE

Between 26 June 1998 and 11 July 1998, 673 students attended the SHS. One hundred and fourteen of these were repeat attenders who, if they had already completed a questionnaire, were not required to do so again. This resulted in a potential sample of 559 students. Since 44 students did not complete questionnaires, a response rate of 92.13% was obtained.

3.2. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

3.2.1. GENDER

Table 3.1. outlines the gender distribution of students (N=515) who completed the questionnaire. The ratio of females to males was 1.8:1. Figures are shown also for students (excluding repeats) who attended the SHS during the time that the study was being conducted as well as the gender distribution at UCT. The ratio of females to males at UCT is 1:1.2.

Table 3.1. *Gender distribution of students who completed the questionnaire, students attending SHS and students at UCT*

GENDER	SAMPLE WHO COMPLETED QUESTIONNAIRE		STUDENTS AT SHS FROM 28 MAY TO 11 JUNE 1998 (excluding repeats)		STUDENTS AT UCT (as at 1/6/98)[32]	
	n	% of total	n	% of total	n	% of total
FEMALE	332	64.5	355	64	7152	44.7
MALE	183	35.5	202	36	8850	55.3
TOTAL	515	100	557	100	16001	100

[29] *All figures rounded to the nearest 2 decimal places (except for p values for reasons outlined in Chapter 2, section 2.9.).*
[30] *When comparisons are not significant, tables showing figures and percentages for the relevant variables will be reported in appendix 10. When this occurs, it will be indicated in the text.*
[31] *Confidence intervals for proportions which are mentioned in the text will, for ease of reading, be selectively presented. Those which are not presented will be assigned to appendix 12. The method of calculating confidence intervals for proportions is also outlined in appendix 12.*
[32] *From official UCT census day statistics (01/06/1998)*

3.2.2. DIFFERENCES BETWEEN GENDER RATIOS OF STUDENTS AT THE UNIVERSITY OF CAPE TOWN AND THOSE ATTENDING THE STUDENT HEALTH SERVICE

χ^2 goodness-of-fit analysis shows that the male/female ratio of students at UCT differs from that of students attending the SHS ($\chi^2 = 81.6$; df = 1; $p < .0000004$). Standardized residuals suggest that in relation to UCT there are significantly more females attending the SHS ($p < .0000004$).

3.2.3. 'RACE'

In Table 3.2. the racial distribution of the total sample, of those students who attended the SHS and of students at UCT are described. It should be noted that, of the total sample, 9 (1.8%) students did not classify themselves.

Table 3.2. *Racial distribution of students who completed the questionnaire, students attending SHS and students at UCT*

'RACE'	SAMPLE WHO COMPLETED QUESTIONNAIRE		STUDENTS AT SHS FROM 28 MAY TO 11 JUNE (excluding repeats)		STUDENTS AT UCT (as at 1/6/98)[32]	
	n	% of total	n	% of total	n	% of total
BLACK	296	59	320	58.4	4361	27.3
COLOURED	31 *	6.1	35	6.4	2157	13.5
INDIAN	30 *	5.9	30	5.5	1044	6.5
OTHER	12 **	2	12	2.2		
WHITE	137	27	151	27.5	8439	52.7
TOTAL	506	100	548	100	16001	100

* For statistical purposes, these categories are pooled (see section 3.2.5)

** For statistical purposes, this category is eliminated (see section 3.2.5)

3.2.4. DIFFERENCES BETWEEN RACIAL RATIOS OF STUDENTS AT THE UNIVERSITY OF CAPE TOWN AND THOSE ATTENDING THE STUDENT HEALTH SERVICE

χ^2 goodness-of-fit analysis indicates that the racial ratios at UCT differ from those of students attending the SHS ($\chi^2 = 288.65$; df = 3; $p < .0000004$). Standardized residuals suggest that there are more Black students than expected [33] attending the SHS ($p < .0000004$) and fewer Coloured and White students than expected ($p < .000007$ and $p < .0000004$ respectively).

[33] *This refers to figures expected by the joint distribution of 2 nominal variables (i.e. by chance).*

3.2.5. RELATIONSHIP BETWEEN GENDER AND 'RACE' IN STUDENTS ATTENDING THE STUDENT HEALTH SERVICE AND THE UNIVERSITY OF CAPE TOWN

For all statistical analyses, original 'race' categories were pooled or eliminated as a result of small (<5) expected frequencies. The category of 'Other' students (n=12) (a nebulous category which may include some Asian Students and may possibly be used by students resisting race classification) was eliminated and the categories of Coloured and Indian students were combined. There are, of course, risks in this kind of procedure because, by pooling categories, results become less specific (Hays,1991). With this categorization, all expected frequencies exceed 5. [34]

Table 3.3. outlines the relationship between gender and 'race' of students who completed the questionnaire, of those attending the SHS and of students at UCT in 1998.

Table 3.3. *Relationship between gender and 'race' in students who completed the questionnaire, students attending the SHS and students at UCT.*

GENDER	'RACE' (Sample who completed questionnaire)							'RACE' (Students at SHS from 28 May to 11 June [excluding repeats])						
	B		C/I		W		Totals	B		C/I		W		Totals
	n	%*	n	%*	n	%*	n	n	%*	n	%*	n	%*	n
FEMALE	179	36.24	43	8.7	97	19.64	319	190	35.45	46	8.58	106	19.78	342
MALE	117	23.68	18	3.64	40	8.1	175	130	24.25	19	3.54	45	8.4	194
Totals	296		61		137		494	320		65		151		536

* % of total sample

GENDER	'RACE' (Students at UCT [as at 2/6/98]) [35]						
	Black		Coloured/Indian		White		Total
	n	%*	n	%*	n	%*	n
FEMALE	1638	10.24	1646	10.28	3867	24.17	7151
MALE	2748	17.17	1555	9.72	4547	28.42	8850
Totals	4386		3201		8414		16001

* % of total sample

[34] *See appendix 9*
[35] *From official UCT census day statistics (02/06/98)*

χ^2 goodness-of-fit analysis suggests that the gender/ 'race' distribution at the SHS differs significantly from those at UCT as a whole (χ^2=450.67; df=2; p< .0000004). Analysis of standardized residuals indicates that, in relation to gender/ 'race' ratios at UCT, more Black females (p< .0000004), more Black males (p< .00004), fewer White females (p< .02), fewer White males (p< .0000004) and fewer Coloured males (p< .000002) than expected attend the SHS.

3.2.6. AGE

Of 488 students who gave their ages, the mean age was 22.7 years, with a minimum of 17 years, a maximum of 44 years and a range of 27 years. The standard deviation was 4.17.

3.2.7. SUBJECTIVE SENSE OF ADJUSTMENT TO UNIVERSITY, SUBJECTIVE SENSE OF ACADEMIC COPING AND REPORTED FINANCIAL COPING

Table 3.4. outlines the proportions of students who feel that they are/are not adjusted to UCT, those who feel that they are/are not coping academically and those who feel that they are/are not coping financially.

Table 3.4. *Proportions of students who feel that they are/are not adjusted to UCT, who feel that they are/are not coping academically and financially.*

	subjective sense of adjustment to UCT		subjective sense of coping academically		reported financial coping	
	n	% of total	n	% of total	n	% of total
Yes	460	90	443	87	292	58
No	50	10	65	13	213	42
Total	510	100	508	100	505	100

Key: *Yes - adjusted to UCT/coping academically/coping financially*
No - not adjusted to UCT/not coping academically/not coping financially

3.2.8. RELATIONSHIP BETWEEN 'RACE', SENSE OF ADJUSTMENT AT UNIVERSITY, SENSE OF COPING ACADEMICALLY AND COPING FINANCIALLY

χ^2 analysis shows 'race' to be independent of both subjective sense of adjustment and sense of coping academically (χ^2=3.56; p< .17 and χ^2 = 7.67; p> .02 respectively [36]). See Table A.10.1. in Appendix 10 for the proportions of students of different racial categories who feel/do not feel adjusted to UCT and who feel that they are/are not coping academically.

See Table 3.5. for the proportions of students of different racial categories who perceive themselves as coping/not coping financially. The table also indicates relatedness or independence of variables by providing Pearson χ^2 values and probabilities. The ϕ_c coefficient suggests the degree of the relationship.

Table 3.5. *Relationship between 'race' and sense of coping financially.*

'RACE'	SENSE OF COPING FINANCIALLY					
	Yes		No		Total	
	n	%*	n	%*	n	%*
Black	117	40	172	60	289	100
Coloured/Indian	40	67	20	33	60	100
White	118	87	18	13	136	100
Total	275		210		485	
χ^2	83.45					
df	2					
p	< .000004					
ϕ_c	0.42					

* %'s represent %'s of racial categories

The Pearson χ^2 value for the 2x3 table of 'race' and sense of coping financially shows these 2 variables to be related (p< .0000004). Given this relationship, it is necessary to examine the degree of that relationship using a measure of association such as phi (ϕ) or Cramer's V (ϕ_c). With a range of 0 to 1, a ϕ_c coefficient of 0.4 indicates a moderate to strong degree of relationship between the 2 variables. Standardized residuals are used to judge the post-hoc significance

[36] *The non-significance of the comparison between 'race' and sense of academic coping is based upon the Bonferroni's level of α = 0.0002 (α' = 0.05) (see Chapter 2, section 2.9.)*

of the departure from independence in one or more of the cells. Analysis of standardized residuals indicates that more White students than expected feel that they are coping financially ($p < .000002$) and fewer White students than expected feel that they are not coping financially ($p<0.0000004$). Fewer Black students than expected feel that they are coping financially ($p < .0001$) and more Black students than expected feel that they are not coping financially ($p < .00001$).

3.3. MINOR PSYCHIATRIC MORBIDITY

3.3.1. PREVALENCE OF MINOR PSYCHIATRIC MORBIDITY [37, 38]

Total scores on the SRQ-20 ranged from a minimum of 0 to a maximum of 19 (where 20 was the highest possible score) (range=19), with a mean of 5.35 and a standard deviation of 4.5. The total scores were significantly asymmetrically distributed (the distribution was positively-skewed, with 73 [14.17%] of the respondents scoring 0) (see Figure 3.2). [39]

[37] *A decision was made to omit items 21-25 from the analysis for the following reasons:*
** psychotic disorders are rare*
** psychotic disorders seldom spontaneously present*
** psychotic disorders are generally recognized by medical personnel. As Beusenberg and Orley (1994) state, 'often patients are easily recognized as being psychotic, and, in most situations, psychotic patients are not aware of their condition, hence, a questionnaire might be inappropriate' (p. 2).*
** queries regarding the clarity of the questions 21-25 (see Chapter 4 section 4.2.4.)*
** the psychometric properties of these questions (e.g. sensitivity and specificity) have not been assessed (Beusenberg & Orley, 1994).*
[38] *See appendix 11 for a frequency table of individual SRQ20 and SRQ25 items*
[39] *See appendix 13 for a table outlining the cumulative counts and percentages of SRQ total scores*

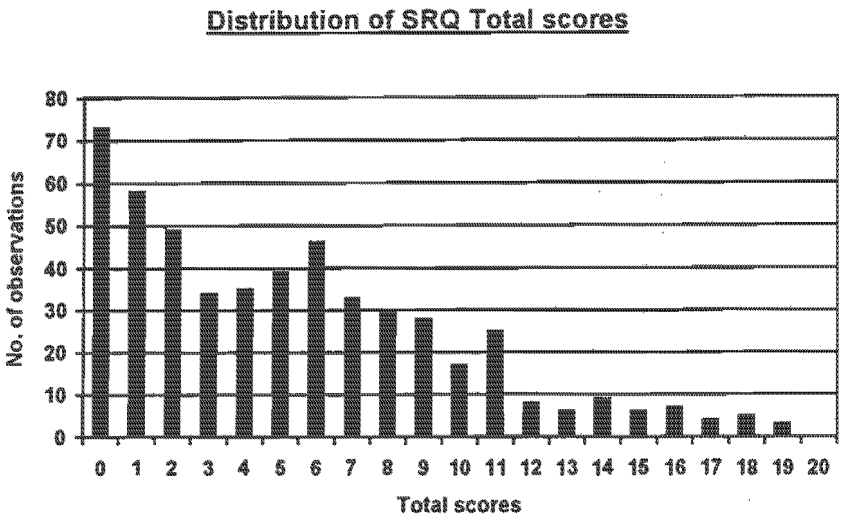

Figure 3.2.

A cut off point of 7|8 (equal or greater than 8) was chosen. This is a fairly conservative cut-off point and the decision was supported by that of Rumble (1994) and other authors who have used the SRQ (e.g. De Jong et al. [1986] in Guinea-Bissau; Dhadphale et al. [1982] in Kenya; Diop et al. [1982] in Senegal; Hall and Williams [1987] in a clinic study in Zimbabwe; Iacoponi and Mari [1989] in Brazil; Lima et al. [1992] in Colombia; Mari and Williams [1985] in Brazil; Reichenheim and Harpham [1991] in Brazil; Sen [1987] in India and Thom et al. [1993] in South Africa).

Based upon the chosen cut-off point of 7|8, and in an attempt to obtain more detailed information regarding severity (where severity is conceptualized as number of symptoms), SRQ total scores were categorized as follows:

1) less than 8
2) equal to or greater than 8 and less than 15
3) equal to or greater than 15

Twenty nine percent of students (n=148) (95% confidence interval of 24.8%-32.7%) attending student health scored 8 or above. Twenty four percent (n = 123) of students scored between 8 and 14 and 5% (n=25) scored between 15 and 19. Fourteen percent (n=73) of the respondents scored zero (i.e. reported no symptoms). Based on a cut-off point of 7|8, therefore, there is a 29% point prevalence of MPM in a sample of students attending the SHS at UCT.

3.3.2. RELATIONSHIP BETWEEN MINOR PSYCHIATRIC MORBIDITY AND 'RACE', GENDER AND/OR SUBJECTIVE SENSE OF ADJUSTMENT

χ^2 analysis shows MPM to be unrelated to 'race' or gender ($\chi^2 = 4.13$; $p > .39$ and $\chi^2 = 4.88$; $p > .09$ respectively). See Table A.10.2. in Appendix 10 for related figures and percentages.

Table 3.6. shows the breakdown of MPM in accordance with sense of adjustment and indicates relatedness of MPM to this variable by providing Pearson χ^2 values, probabilities and ϕ_c coefficients.

Table 3.6. *Relationship between MPM and subjective sense of adjustment*

MPM	SENSE OF ADJUSTMENT				
	YES		NO		Total
	n	%*	n	%*	n
SRQ total<8	343	74	20	40	363
8≤SRQ total <15	104	23	18	36	122
SRQ total≥15	13	3	12	24	25
Total	460	100	50	100	510
χ^2	52.2				
df	2				
p	< .000004				
ϕ_c	0.32				

* *%'s represent %'s of racial categories, gender categories and categories of adjustment*

χ^2 analysis indicates that MPM and subjective sense of adjustment to UCT are related variables ($p < .000004$). A ϕ_c coefficient of 0.32 indicates a moderate degree of relationship. Analysis of standardized residuals indicates that fewer students than expected who do not feel adjusted score below 8 on the SRQ ($p < .004$) and more than expected of those with scores equal to or greater than 8 and below 15 and over 15 do not feel settled at UCT ($p < .04$ and $p < .0000004$ respectively). Fewer students than expected who do feel settled score 15 or above ($p < .02$). If MPM categories are pooled to provide 2 possibilities - MPM and no MPM ($P < .000004$; $\phi = -.23$ [40]) - then odds ratios indicate that a student who does not feel settled at UCT is 4.4 times as likely to score 8 or above on the SRQ than a student who does feel settled at UCT (95% confidence interval on the odds ratio is 2.39 to 8.07).

[40] *The negative ϕ coefficient indicates an inverse relationship i.e. less adjustment is related to greater MPM.*

3.3.3. RELATIONSHIP BETWEEN STUDENTS' REPORTED REASONS FOR ATTENDANCE AT SHS AND THEIR SCORES ON THE SRQ

Students' reported reasons for attendance were initially coded as 1) contraception, 2) other (i.e. general medical reasons), 3) emotional and 4) combinations of the above. For statistical reasons, however, (i.e. in order to obtain expected frequencies > 5), 'contraception' and 'other' were combined into one category (Medical [M]) and emotional and any combinations containing emotional complaints were combined into one category (Emotional [E]).

Table 3.7. outlines the relationship between students' reported reasons for attendance and their scores on the SRQ.

Table 3.7. *Relationship between students' reported reasons for attendance and MPM*

MPM	REPORTED REASONS FOR ATTENDANCE				
	Emotional		Medical		Total
	n	%*	n	%*	n
SRQ total<8	4	18	315	74	319
8≤ SRQ total <15	9	41	96	23	105
SRQ total≥15	9	41	13	3	22
TOTAL	22	100	424	100	446
χ^2	72.89				
df	2				
p	< .000004				
ϕ_c	0.4				

*%'s represent %'s of categories of students' reported reasons for attendance

Of the 127 students who scored positively on the SRQ and who outlined their reason for attending SHS, 18 (14%) reported emotional or some combination of emotional and medical reasons for attendance. Of the 22 who scored 15 or above on the SRQ, 9 (41%) reported emotional reasons for attendance. Of the 22 emotional reasons for attendance, 18 (82%) scored 8 or above on the SRQ.

χ^2 analysis indicates a fairly strong relationship between students' reasons for attendance and scores on the SRQ ($p < .000004$; $\phi_c = 0.4$). Analysis of standardized residuals suggests that fewer than expected of those with scores of below 8 gave emotional reasons for attendance ($p < .002$) and more than expected of those with scores of 15 or above gave emotional reasons for attendance ($p < .0000004$). If

MPM categories are pooled to provide 2 possibilities - MPM and no MPM - ($p < .000004$; $\phi = -0.27$ [41]) then odds ratios indicate that a student who provides an emotional reason for attendance is 12.9 times as likely to score 8 or above on the SRQ than a student who provides a medical reason for attendance (95% confidence interval for odds ratio is 4.27 to 38.38).

3.3.4. RELATIONSHIP BETWEEN REPORTED REASONS FOR ATTENDANCE AT SHS AND GENDER

χ^2 analysis suggests that there is no significant relationship between gender and reported reasons for attendance ($\chi^2 = 0.54$; df = 1; $p > .46$). See Table A.10.3. in Appendix 10 for related figures and percentages.

3.3.5. RELATIONSHIP BETWEEN MINOR PSYCHIATRIC MORBIDITY AND PREVIOUS CONSULTATIONS WITH MENTAL HEALTH PROFESSIONALS

Table 3.8. describes the relationship between MPM and previous consultations with MHP's (psychologists, psychiatrists and/or social workers).

Table 3.8. *Relationship between MPM and previous consultations with MHP's*

MPM	PREVIOUS CONSULTATIONS WITH MHP'S				
	YES		NO		TOTAL
	n	%*	n	%*	n
SRQ total<8	68	54	280	77	348
8≤ SRQ total <15	45	35	72	20	117
SRQ total≥15	14	11	11	3	25
TOTAL	127	100	363	100	490
χ^2	28.74				
df	2				
p	< .000004				
ϕ_c	0.24				

*%'s represent %'s of students who have/have not previously consulted MHP's

Forty two percent of those who scored 8 or above on the SRQ have previously consulted MHP's. Fifty six percent of those who scored 15 or above on the SRQ have previously consulted MHP's.

[41] *The negative ϕ coefficient is a result of the way in which these factors were coded for statistical analysis and need not be taken into consideration in understanding the implications of the relationship.*

χ^2 analysis indicates that students' scores on the SRQ are related to previous consultation with a MHP ($p < .000004$). The degree of this relationship, however, is fairly small. Standardized residuals suggest that fewer than expected of those who score below 8 on the SRQ have consulted a MHP ($p < .01$). More than expected of those who scored both between 8 and 14 and 15 and above have consulted a MHP ($p < .004$ and $p < .002$ respectively). If MPM categories are pooled into those who score below 8 on the SRQ and those who score 8 or more on the SRQ ($p < .000004$; $\phi = 0.23$) then odds ratios suggest that a student who scores 8 or above on the SRQ is 2.9 times as likely to have previously consulted a MHP than a student who scores below 8 on the SRQ (95% confidence interval is 1.95 to 4.27).

Of the 127 students who have previously consulted a MHP, 38 (30%) saw a MHP at the UCT SHS, 70 (55%) elsewhere and 19 (15%) both at SHS and elsewhere. Of the 59 who scored above 8 on the SRQ and have previously consulted a MHP, 22 (37%) saw a MHP at SHS, 27 (46%) elsewhere and 10 (17%) at SHS and elsewhere.

3.4. TRAUMA AND PTSD

3.4.1. EXPOSURE TO TRAUMATIC EVENTS

Fifty two percent (n=267) (95% confidence interval of 47.9% to 55.8%) of students reported that they have witnessed or experienced a situation that was frightening or traumatic or where they felt that their life, or that of someone else, was in danger. Sixty (22.5%) (12% of total sample) of these students recorded having witnessed or experienced multiple (2 or more) traumatic events. [42]

[42] *See appendix 14 for more detail on multiple traumas.*

Different categories and frequencies of trauma are described in Table 3.9.

Table 3.9. *Categories and frequencies of trauma*

CATEGORY	INCIDENCE	
	n	%
beating	54	14.9
bereavement	6	1.7
car accidents	50	13.8
knife attacks	48	13.3
sexual assault	35	9.7
shooting	46	12.7
threats	62	17.0
other	61[43]	16.9
total	362	100.0

3.4.2. LOCATION OF TRAUMATIC EVENTS

The administered questionnaire provided unclear information regarding the location of traumatic events (see Chapter 4 section 4.2.8.3.). Therefore, only limited results regarding this information will be reported, focusing specifically upon traumatic events experienced on the UCT campus (including residences). Altogether, 30 (8.3% of reported traumatic events) traumas which were experienced on campus were reported. It should be noted that this figure includes cases of multiple traumatic events experienced by the same person (3 by one person and 2 by another). In 7 cases where multiple traumas and locations were specified, it was not possible to match trauma with location. Details of traumatic events experienced on campus (excluding the above-mentioned 7) are outlined in Table 3.10.

Table 3.10. *Traumatic events experienced on UCT campus*

NUMBER OF INCIDENTS	NATURE OF TRAUMA
5	threat
3	car accident
3	sexual assault
2	knife attack
2	beating
1	chased by car at night
1	unwanted sexual advances
1	trance
1	out of body experience
1	friend fell down stairs
1	arrested
1	problem with husband
1	shooting
Total = 23	

[43] *See appendix 15 for a description (where available) of traumatic events classified as 'other'.*

3.4.3. PREVALENCE OF SYMPTOMS OF POST-TRAUMATIC STRESS DISORDER

Ten percent of the entire sample (n=52) (95% confidence interval is 7.7% to 12.9%) were classified as having PTSD in accordance with the classification criteria outlined in section 2.4.1.2. of Chapter 2. Nineteen and a half percent of those who experienced trauma (n=267) (95% confidence interval is 16% to 24%) were classified as suffering from PTSD.

3.4.4. RELATIONSHIP BETWEEN CATEGORIES OF TRAUMA AND POSTTRAUMATIC STRESS DISORDER

The relationship of different categories of trauma to PTSD is outlined in Table 3.11.

Table 3.11. *Relationship between different categories of trauma and PTSD*

	Beatings	Bereavement	Car Accidents	Knife Attacks	Other	Sexual Assault	Shooting	Threats
χ^2 [44]	6.22	0.75	3.52	0.44	0.1	17.68	0.0003	0.5
df	1	1	1	1	1	1	1	1
p	> .01	> .39	> .06	> .51	> .75	< .00003	> .98	> .48
ϕ	0.15 [45]	—	—	—	—	0.26	—	—

PTSD, therefore, is most strongly related to sexual assault.

Odds ratios of significant cross-tabulations indicate that, *amongst those who have experienced trauma,*

*a person who has witnessed or received a beating is 2.3 times as likely to have symptoms of PTSD as a person who has not witnessed or received a beating (95% confidence interval for odds ratio is 1.18 to 4.65).

*a person who has witnessed sexual assault or has been sexually assaulted, is 4.6 times as likely to manifest symptoms of PTSD as a person who has not witnessed sexual assault or been sexually assaulted (95% confidence interval for odds ratio is 2.17 to 9.63).

[44] *χ^2 refers to cross-tabulation of categories of trauma and PTSD*

[45] *Note that, although a ϕ coefficient is provided for the relationship between beatings and PTSD and an odds ratio calculated, the relationship is NOT significant in accordance with the Bonferroni level of significance of $\alpha = 0.0002$*

3.4.5. RELATIONSHIP BETWEEN POSTTRAUMATIC STRESS DISORDER AND MULTIPLE/SINGLE TRAUMATIC EVENTS

χ^2 analysis suggests that PTSD is not differentially related to multiple or single traumatic events (χ^2=2.55; df = 1; p> .11). See Table A.10.4. in Appendix 10 for related figures and percentages.

3.4.6. RELATIONSHIP BETWEEN POSTTRAUMATIC STRESS DISORDER AND MINOR PSYCHIATRIC MORBIDITY

This analysis attempts to establish the comorbidity between PTSD and MPM. As previously discussed in Chapter 1, section 1.3.2.3.4., the fact that a number of the DSMIV criteria for PTSD overlap with those for general anxiety disorder and depression confounds the issue of comorbidity and raises the question of whether or not PTSD can be regarded as a distinct disorder. This is a complex issue which needs to be considered by all research undertaking comorbidity assessments between PTSD, depression and anxiety. In this particular study, however, the issue is further complicated by the use of a number of identical items to assess PTSD and MPM (namely items 3 and 11 of the SRQ/criteria C4 and D1 of the DSMIV [American Psychiatric Association, 1994] classification for PTSD). In order to counter this identical operationalization of symptoms for PTSD and MPM, criteria C4 and D1 have been eliminated from the algorithm used to assess the presence of PTSD in this particular analysis. Eliminating these items results in a prevalence of PTSD of 8.2% (n=42).

Table 3.12. describes the relationship between MPM and PTSD (with criteria C4 and D1 having been eliminated).

Table 3.12. *Relationship between MPM and PTSD*

MPM	POSTTRAUMATIC STRESS DISORDER				
	YES		NO		TOTALS
	n	%*	n	%*	n
SRQ total<8	10	24	357	75	367
8≤SRQ total <15	19	45	104	22	123
SRQ total≥15	13	31	12	3	25
TOTAL	42	100	473	100	515
χ^2	87.34				
df	2				
p	< .000004				
ϕ_c	0.41				

* %'s represent categories of PTSD

Statistical analysis indicates, therefore, that MPM and PTSD are quite strongly related ($p < .000004$; $\phi_c = 0.41$). Analysis of standardized residuals suggests that more than expected of those with scores of 8 or above and below 15 and above 15 on the SRQ have PTSD ($p < .0001$ and $p < .0000004$ respectively) and fewer than expected of those with scores of 15 and above do not have PTSD ($p < .01$). Fewer than expected of those with scores of 8 or below have PTSD ($p < .0001$).

If MPM categories are pooled into scores below 8 on the SRQ and scores of 8 and above 8 on the SRQ ($p < .000004$; $\phi = -0.33$ [46]), then odds ratios suggest that a student who has symptoms of PTSD is 9.85 times as likely to suffer from MPM as a student who does not have symptoms of PTSD (95% confidence interval on odds ratio is 4.7 to 20.8)

3.4.7. RELATIONSHIP BETWEEN POSTTRAUMATIC STRESS DISORDER AND GENDER

χ^2 analysis suggests that PTSD and gender are not significantly related ($\chi^2 = 1.87$; df = 1; $p > .17$). See Table A.10.5. in Appendix 10 for related figures and percentages. [47]

[46] *The negative ϕ coefficient is a result of the way in which these factors were coded for statistical analysis and need not be taken into consideration in understanding the implications of the relationship.*

[47] *See appendix 16 for discussion of the relationship between current PTSD and time since traumatic event. Since the questionnaire did not adequately assess chronicity (see chapter 4 section 4.2.8.1.2.) and the assessment of time since the traumatic event is of limited utility, this will not be covered in the main body of the text.*

3.5. SUBSTANCE ABUSE

For all analyses involving substance abuse, SRQ total scores were categorised as either below 8 or 8 and above (this in order for expected frequencies to exceed 5). In research on substance abuse, the extent of substance use is frequently underreported by participants (see Chapter 4, section 4.2.9.). It should be specifically noted, therefore, that all prevalences in this section refer to *reported* prevalences; for ease of presentation, this will not be indicated throughout the text.

3.5.1. THE FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION [48]

Out of 506 students, 10 (1.98%) reported that they drink alcohol daily, 15 (2.96%) 3-4 days a week, 103 (20.36%) 1-2 days a week, 96 (18.97%) 1-2 days a month, 102 (20.16%) less often than 1-2 days a month and 180 (35.57%) never consume a drink containing alcohol.

To enable statistical analysis, 'binge-drinking' was re-categorized as follows:
*categories 1 (every day) and 2 (3-4 times a week) were pooled
*categories 5 (less often) and 6 (never) were pooled
'Problem-drinking' was re-categorized as follows:
*categories 1 (every day), 2 (3-4 days a week) and 3 (1-2 days a week) were pooled.

Out of 320 students who consume alcohol, 11 (3.44%) 'binge drink' either every day or 3-4 times a week, 38 (11.88%) 1-2 days a week, 66 (20.63%) 1-2 days a month and 205 (64.06%) 'binge-drink' less often than 1-2 days a month or never 'binge drink'. Out of the total sample (N=515), therefore, 9.5% (95% confidence interval 0f 7.1% to 12.5%) of students 'binge drink' on a daily and/or weekly basis.

Out of 315 students, 9 (2.86%) engage in 'problem-drinking' either daily or weekly, 19 (6.03%) monthly, 71 (22.54%) less often and 216 (68.57%) never engage in

[48] *See chapter 2 section 2.4.1.3. for definitions of 'binge drinking' and 'problem drinking'.*

'problem-drinking'. Out of the total sample (N=515), therefore, 5.4% (95% confidence interval of 3.8% to 7.7%) of students 'problem drink' on a daily and/or weekly and/or monthly basis.

3.5.2. RELATIONSHIP BETWEEN THE FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION AND MINOR PSYCHIATRIC MORBIDITY

χ^2 analysis indicates that there is no relationship between alcohol consumption (χ^2=1.41; df=5; p> .92), 'binge drinking' (χ^2=7.12; df = 3, p> .07) and/or 'problem drinking' (χ^2=6.59; df=3; p> .09) and MPM (See Table 10.6. in Appendix 10 for related figures and percentages)

3.5.3. RELATIONSHIP BETWEEN THE FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION AND GENDER

χ^2 analysis indicates that gender and frequency of alcohol consumption and gender and 'binge drinking' are not related (χ^2=9.56; df=5; p> .09 and χ2 = 17.98; df=3; p< .0005 [49] respectively). See appendix 10, Table A.10.7. for the related table of figures. However, 'problem drinking' is moderately related to gender of students (p< .00002; ϕ_c=0.3). Standardized residuals indicate that more men than expected 'problem drink' daily or weekly, monthly or less often than monthly (p< .03, p< .02 and p< .04 respectively) and fewer men than expected never 'problem drink' (p< .02) (see Table 3.13.).

Table 3.13. *Relationship between gender and 'problem drinking'*

GENDER	'PROBLEM DRINKING'								
	dly/wkly		monthly		less		never		total
	n	%*	n	%*	n	%*	n	%*	n
F	2	22	6	32	34	48	150	69	192
M	7	78	13	68	37	52	66	31	123
Totals	9	100	19	100	71	100	216	100	315
χ^2	24.2								
df	3								
p	< .00002								
ϕ_c	0.3								

* *%'s represent %'s of categories of frequencies of alcohol consumption*

[49] *The non-significance of the comparison between gender and 'binge drinking' is based upon the Bonferroni level of significance (α = 0.0002; α' = 0.05). See Chapter 2, section 2.9.*

3.5.4. RELATIONSHIP BETWEEN THE FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION AND 'RACE'

χ^2 analysis indicates that whilst the frequency of alcohol consumption and 'race' are fairly strongly related ($p < .000004$; $\phi_c = 0.4$), (See Table 3.14) 'race' is independent of 'binge drinking' and 'problem drinking' ($\chi^2 = 8.19$; df =6; $p > .22$ and $\chi^2 = 11.82$; df=6; $p > .07$ respectively) (see Appendix 10 Table A.10.8.). Standardized residuals indicate that fewer Black students than expected consume alcohol 3-4 times a week and 1-2 times a week ($p < .02$ and $p < .00009$ respectively) and more Black students than expected never consume alcohol ($p < .00008$). More White students than expected consume alcohol daily and weekly ($p < .02$, $p < .001$ and $p < .0000004$ respectively) and fewer White students than expected consume alcohol less than monthly ($p < .03$) or never consume alcohol ($p < .0000004$). Fewer Coloured/Indian students than expected consume alcohol 1-2 times a week ($p < .03$).

Table 3.14. *Relationship between 'race' and the frequency of alcohol consumption*

'RACE'	ALCOHOL CONSUMPTION												
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		never		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n
B	3	33	3	20	31	31	42	46	68	72	141	82	288
C/I	0	0	1	7	6	6	17	18	10	10	26	15	60
W	6	67	11	73	64	63	33	36	17	18	6	3	137
Totals	9	100	15	100	101	100	92	100	95	100	173	100	485
χ^2	150.12												
df	10												
p	< .000004												
ϕ_c	0.4												

** %'s represent %'s of categories of frequencies of alcohol consumption*

3.5.5. RELATIONSHIP BETWEEN FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION AND INTERFERENCE WITH ACADEMIC WORK REQUIREMENTS. [50]

For statistical purposes (to allow expected frequencies >5), those students who never drink alcohol were eliminated from analyses in this section.

[50] *In a rather extensive assessment of the frequency and extent of alcohol consumption for a pilot study, questions were also asked about subjective sense of needing to cut down on drinking, complaints by friends/relatives and interference with academic performance. It was felt that the former 2 categories were rather peripheral to this study and an analysis of them has been assigned to appendix 17. Interference with academic work, however, will be covered in the main text.*

Table 3.15. describes the proportions of students who consume alcohol, 'binge drink' and 'problem drink' who feel that their drinking interferes with their academic work requirements. χ^2 analysis shows that the frequency of alcohol consumption and interference with academic work requirements are moderately related ($p< .00006$; $\phi_c=0.28$). Standardized residuals show this relationship to lie with those who drink daily - more than expected of those who drink daily feel that alcohol consumption interferes with their academic work requirements ($p< .00002$). 'Binge drinking' and interference with academic work requirements are moderately/strongly related ($p< .000004$; $\phi_c=0.37$). Standardized residuals suggest that more than expected of those who 'binge drink' daily/3-4 times a week and those who 'binge drink' 1-2 times a week feel that alcohol interferes with their academic work requirements ($p< .0000004$ and $p< .0004$ respectively). Fewer than expected of those who 'binge drink' infrequently or never 'binge drink' feel that drinking interferes with their academic work requirements ($p< .01$). 'Problem drinking' and interference with work requirements are shown to be moderately/strongly related ($p< .000004$; $\phi_c=0.35$). Standardized residuals suggest that more than expected of those who 'problem drink' daily/weekly, monthly or infrequently feel that 'problem drinking' interferes with their academic work requirements ($p< .000007$, $p< .01$, $p< .03$ respectively). Fewer than expected of those who never 'problem drink' feel that drinking interferes with their academic work requirements ($p< .003$).

Table 3.15. *Relationship between the frequency and extent of alcohol consumption and academic performance*

ACADEMIC COPING	ALCOHOL CONSUMPTION										
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n
Yes	5	50	3	21	12	12	6	6	5	5	31
No	5	50	11	79	91	88	88	94	92	95	287
Totals	10	100	14	100	103	100	94	100	97	100	318
χ^2	24.55										
df	4										
p	< .00006										
ϕ_c	0.28										

ACADEMIC COPING	'BINGE DRINKING'									'PROBLEM DRINKING'									
	dly/3-4w		1-2/wk		monthly		less/nvr		total	dly/wkly		monthly		less		never		total	
	n	%*	n	%*	n	%*	n	%*	n	n	%*	n	%*	n	%*	n	%*	n	
Yes	6	55	10	27	6	9	9	4	31	5	56	5	26	12	17	9	4	31	
No	5	45	27	73	60	91	194	96	286	4	44	14	74	58	83	205	96	281	
Totals	11	100	37	100	66	100	203	100	317	9	100	19	100	70	100	214	100	312	
χ^2	44.07									38.54									
df	3									3									
p	< .000004									< .000004									
ϕ_c	0.37									0.35									

** %'s represent %'s of categories of frequencies of alcohol consumption*

**Key: Yes - drinking does interfere with academic performance*
No - Drinking does not interfere with academic performance

3.5.6. THE FREQUENCY AND EXTENT OF CANNABIS CONSUMPTION

In order to enable statistical analysis, categories 1,2 and 3 of cannabis (dagga) consumption were pooled.

Out of 469 students, 21 (4.48%) (95% confidence interval of 3% to 6.7%) smoke cannabis daily or weekly, 19 (4.05%) smoke cannabis 1-2 days a month, 62 (13.22%) smoke cannabis less often and 367 (78.25%) never smoke cannabis.

3.5.7. RELATIONSHIP BETWEEN THE FREQUENCY AND EXTENT OF CANNABIS CONSUMPTION AND MINOR PSYCHIATRIC MORBIDITY, GENDER AND 'RACE'

χ^2 analysis indicates that cannabis consumption is related neither to minor psychiatric morbidity nor to gender (χ^2 = 0.75, df = 3, p>.86 and χ^2 = 4.88, df =3, p>.18 respectively) (see Table A.10.9. in Appendix 10 for related figures and percentages). It is, however, quite weakly related to 'race' (p< .00003; ϕ_c=0.18). Standardized residuals suggest that more White students than expected use cannabis monthly and infrequently (p< .01 and p< .001 respectively). Fewer

White students than expected never use cannabis (p< .02). Fewer Black students than expected use cannabis infrequently p< .01) (see Table 3.16.).

Table 3.16. *Relationship between cannabis consumption and 'race'*

FREQUENCY OF CANNABIS CONSUMPTION	'RACE'							
	B		C/I		W		Totals	
	n	%*	n	%*	n	%*	n	%*
d/w	9	43	3	14	9	43	21	100
m	6	33	1	6	11	61	18	100
io	21	35	7	12	31	53	59	100
n	224	64	43	12	86	24	353	100
Totals	260		54		137		451	
χ^2	30.83							
df	6							
p	< .00003							
ϕ_c	0.18							

* %'s represent %'s of categories of frequencies of cannabis consumption

* Key d/w = daily/weekly
m = monthly
io = less often
n = never

3.5.8. THE FREQUENCY AND EXTENT OF THE USE OF 'HARD DRUGS'

Out of 515 students, 22 (4.27%) (95% confidence interval of 2.8% to 6.4%) have used single or multiple 'hard' drugs in the last year. Eleven students reported using multiple 'hard' drugs. Two students reported using methaqualone (mandrax), 18 ecstasy (methylenedioxymethamphetamine), 2 inhalants and 6 reported using cocaine. Other 'hard' drugs that are being used include 'magic mushrooms' (fungi of the genus psilocybe and amanita [Emmet & Nice, 1996]), Lysergic Acid Diethylamide (LSD, Acid), Amphetamines (speed) and methylamphetamine (meth, crystals), nexus (4Bromo 2.5 dimethoxyphenethylamine - an hallucinogen with effects similar to LSD), and heroin (Diamorphine). One student reported using 'hard' drugs daily, 3 weekly, 3 monthly, 1 weekly and monthly, 4 every three months, 1 three monthly and six monthly, 2 six monthly and 7 less often.

3.5.9. RELATIONSHIP BETWEEN USE OF 'HARD' DRUGS, MINOR PSYCHIATRIC MORBIDITY, GENDER AND 'RACE'

χ^2 analysis indicates that the use of 'hard' drugs is related neither to MPM nor to gender (χ^2=0.65; p> .42 and χ^2=0.99; p>.32 respectively) (See Table A.10.10. in Appendix 10 for related figures and percentages). It is, however, related to 'race' to a moderate degree (p< .000004; ϕ_c=0.27). Standardized residuals indicate that

more White students than expected use 'hard' drugs (p< .000005) and fewer Black students than expected use 'hard' drugs (p< .0001) (see Table 3.17.)

Table 3.17. *Relationship between use of 'hard' drugs and 'race'*

USE OF 'HARD DRUGS'	'RACE'							
	B		C/I		W		Totals	
	n	%*	n	%*	n	%*	n	%*
Yes	0	0	5	23	17	77	22	100
No	296	63	56	12	120	25	472	100
Totals	296		61		137		494	
χ^2	36.18							
df	2							
p	< .000004							
ϕ_c	0.27							

* %'s represent %'s of categories of frequencies of drug consumption
* Key Y= does use hard drugs
N= does not use hard drugs

3.6. PRACTITIONER ASSESSMENT

3.6.1. RELATIONSHIP BETWEEN HSR RATINGS, MINOR PSYCHIATRIC MORBIDITY, GENDER AND 'RACE'

For statistical purposes, in order to avoid expected frequencies <5, and also in order to simplify the analysis, HSR ratings were regrouped into 3 categories, 1) a physical health problem only, 2) a mental health problem only and a physical and mental health problem and 3) no health problem of any kind or no rating possible.

χ^2 analysis indicates that HSR ratings are unrelated to 'race' (χ^2 = 11.4; df = 4; p> .02 [51]) (see Table A10.11 in Appendix 10 for related figures and percentages). See Table 3.18. for figures outlining the relationship between HSR ratings and MPM and gender.

[51] *The non-significance of the comparison between HSR ratings and 'race' is based upon the Bonferroni significance level of α = 0.0002 (α' = 0.05). See Chapter 2, section 2.9.*

Table 3.18. *Relationship between HSR ratings and MPM/gender.*

HSR RATINGS	MPM								GENDER					
	SRQ total<8		8≤SRQ total<15		SRQ total≥15		Total		F		M		Total	
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Physical	213	74	68	24	7	2	288	100	148	51	140	49	288	100
Emotional	26	42	26	42	10	16	62	100	34	55	28	45	62	100
No rating	118	77	28	18	8	5	154	100	144	93	10	6	154	100
Totals	357		122		25		504		326		178		504	
χ^2	38.16								80.92					
df	4								2					
p	< .000004								< .000004					
ϕ_c	0.19								0.4					

* %'s refer to %'s of HSR categories

Of 147 students who scored 8 and above on the SRQ, 36 (25%) (95% confidence interval of 18.6% to 33%) were given an emotional rating by practitioners. Of the 147 students who scored 8 or more on the SRQ, 111 (75%) were given a physical rating or no rating possible. Of the 357 who scored below 8 on the SRQ, 26 (7.3%) were given an emotional rating. Of the 25 students who scored 15 and above on the SRQ, 10 (40%) were given an emotional rating.

χ^2 analysis indicates that HSR ratings are moderately related to SRQ scores ($p< .000004; \phi_c=0.19$). Analysis of standardized residuals shows that practitioners at SHS are accurately detecting emotional difficulties; the relationship between ratings of emotional difficulties and scores on the SRQ increases monotonically. Thus, fewer students than expected with problems which were labelled as emotional by practitioners scored below 8 on the SRQ ($p< .003$), more students than expected with problems which were labelled as emotional by practitioners scored between 8 and 15 and over 15 on the SRQ ($p< .002$ and $p< .00004$ respectively). Fewer students than expected with problems labelled as physical by practitioners scored above 15 on the SRQ ($p<0.03$).

A moderate/strong relationship is also shown between HSR ratings and gender ($p< .000004; \phi_c=0.4$). Analysis of standardized residuals show that fewer females then expected received ratings of a physical problem by practitioners ($p< .003$) and more males than expected received ratings of a physical problem by practitioners ($p< .00007$). More females than expected received a rating of no health problem ($p< .000004$) and fewer males than expected received a rating of no health problem ($p< .000001$). This pattern, it is suggested, may be explained by the large number

of female students attending student health to obtain contraception (rated by practitioners as no health problem).

3.6.2. RELATIONSHIP BETWEEN HSR RATINGS AND PRACTITIONERS' DIAGNOSES

Of 284 students assessed by practitioners as having a physical health problem only, 277 (97.54%) were given a 'medical' diagnosis. Of the 62 students assessed by practitioners as having a mental health problem only or a mental and physical health problem, 47 (75.81%) were given an 'emotional' diagnosis. Of the 152 students assessed by practitioners as having no health problem or where no rating was thought possible, none was given 'emotional' diagnoses.

χ^2 analysis indicates practitioner's assessments on the HSR and their diagnoses are related ($\chi^2 = 309.76$; df =2; $p < .000004$), with a ϕ_c coefficient of 0.79 indicating a very strong relationship. Standardized residuals suggest that, especially with regard to emotional problems, HSR ratings and practitioner diagnoses were in strong agreement. Fewer problems than expected rated emotional on the HSR were given medical diagnoses by practitioners ($p < .0000004$). Fewer problems than expected rated as physical on the HSR were given emotional diagnoses ($p<0.000009$), more problems than expected that were rated as emotional on the HSR were given emotional diagnoses ($p < .0000004$) and fewer problems than expected that were rated as no health problem on the HSR were given emotional diagnoses ($p < .00003$).

3.6.3. REFERRALS BY PRACTITIONERS

See Table 3.19. for details of referrals in accordance with scores obtained on the SRQ and Table 3.20 for referral details in accordance with ratings on the HSR.

Table 3.19. *Referrals in accordance with SRQ scores*

MPM	REFERRAL PATTERNS												
	MHS'S UCT		MEDS		MHS + MEDS		ELSEWHERE		MEDS + ELSE		OTHER		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	n
SRQ total<8	3	16	1	50	1	50	13	62	0	0	273	73	291
SRQ total≥8	16	84	1	50	1	50	8	38	3	100	100	27	129
TOTALS	19	100	2	100	2	100	21	100	3	100	373	100	420

Key:
MHS's UCT = mental health services at UCT SHS
MEDS = psychotropic medication
MHS + MEDS = mental health services at UCT SHS and psychotropic medication
ELSEWHERE = referrals elsewhere
MEDS + ELSE = psychotropic medication and referral elsewhere
OTHER = other referral

Table 3.20. *Referrals in accordance with HSR ratings*

HSR RATINGS	REFERRAL PATTERNS												
	MHS'S UCT		MEDS		MHS + MEDS		ELSEWHERE		MEDS + ELSE		OTHER		TOTAL
	n	%	n	%	n	%	n	%	n	%	n	%	n
1	3	16	0	0	0	0	11	53	0	0	240	65	254
2	16	84	2	100	2	100	7	33	3	100	30	8	60
3	0	0	0	0	0	0	3	14	0	0	101	27	104
TOTALS	19	100	2	100	2	100	21	100	3	100	371	100	418

Key:
1 = physical rating
2 = emotional rating
3 = no rating possible

Table 3.21. outlines the nature of referrals 'elsewhere' for those patients who scored 8 or above on the SRQ.

Table 3.21. *The nature of referrals 'elsewhere' for patients scoring ≥ 8 on SRQ*

NATURE OF REFERRALS	SRQ20 TOTAL SCORE	HSR RATING
Reassess in a week (has seen psychologist at SHS)	16	2
General practitioner	11	3
Private psychologist	8	2
Lecturer in UCT psychology department (refused psychotherapy)	11	3
Drug Counselling Centre	9	2
Physiotherapy clinic	8	3
Respiratory physician	15	3
ante-natal clinic	9	4
optometrist	9	1
chest x-ray	13	1
GP	13	1
Total = 11		

Table 3.22. outlines 'other' referrals/interventions (that were specified) for those students scoring 8 and above on the SRQ or with an 'emotional' HSR rating.

Table 3.22. *'Other' referrals/interventions for students scoring ≥ 8 on SRQ*

Nature of referral	HSR Rating	SRQ total score
Follow up referral	3	0
Currently seeing psychologist	3	9
Reassurance	3	8

3.6.4. REFERRALS WHICH WERE DESIRED BUT NOT POSSIBLE

Of the 6 'desired referrals', 4 were related to mental health issues. Table 3.23 details 'desired referrals', matching them with SRQ scores and HSR ratings.

Table 3.23. *'Desired' referrals related to mental health issues*

Intervention/referral	Desired referral/problem confronted	SRQ score	HSR rating
Referral to Groote Schuur hospital medical outpatient department	Psychologist	2	3
Benzodiazapines for short term containment	has referral to Groote Schuur hospital - practitioner concerned about patient's needs being met	19	2
Psychotherapy	patient not willing	6	3
Lecturer in psychology department, UCT	patient refused psychotherapy	11	3

3.7. STUDENT MENTAL HEALTH SERVICES AT UCT

An investigation into the various mental health services for students at UCT has been outlined in Chapter 1, section 1.3.5.1. and will be further discussed in Chapter 4.

* * * * * * * * *

The above-mentioned results, their relationship to the literature and implications for the SHS at UCT will be discussed in the following chapter.

Chapter 4: DISCUSSION

4.1. SUMMARY OF MAJOR FINDINGS

4.1.1. Socio-demographic findings

* Analysis of attendance patterns at SHS indicates that, in comparison to UCT as a whole, a disproportionately high percentage of Black students and a disproportionately low percentage of White students attend the SHS. It is suggested that this pattern may be, at least to some extent, a consequence of racial ratios of students living in UCT residences and receiving UCT financial assistance. Most of the UCT residences are located in the vicinity of the Protem Campus and students without transport may find it more convenient to attend SHS than to seek private medical care. Of all students in UCT residences in 1998, 71% are Black and 21% are White (secretary of 'residence and student housing' office UCT, personal communication, December 12, 1998). As previously discussed, moreover, students on financial assistance are attended to at SHS free of charge. 78.5% of students on UCT financial aid are Black, 12.5% Coloured, 6% White and 3% Indian (as at end of October 1998) (secretary of 'financial assistance' office UCT, personal communication, December 12, 1998).

* In comparison to UCT as a whole, a disproportionately high number of women attend the SHS. This may be understood as a consequence of the age of students and their expected health needs. It may be argued that, besides common health problems of a viral and bacterial nature, many of the health concerns of students are related to reproductive issues. Due to social and practical factors, more women than men are likely to attend the SHS for contraceptive advice and for the free distribution of oral contraceptives.

* Black students perceive themselves as struggling financially. This pattern, it is argued, may be understood as a consequence of the apartheid system with its unequal distribution of resources and opportunities. The perceptions of Black students of the experience of financial difficulties are aligned with the above-mentioned statistics of the racial ratios of students receiving UCT financial assistance.

* 'Race' and subjective sense of academic coping were not found to be related. This finding is counter to those of the UCT Readmissions Review Committee (Goliath, 1997; Van der Merwe, 1998), as well as the findings of the Equal Opportunity Research Project (Hall et al., 1995).

* 'Race' and subjective sense of adjustment to UCT were not found to be related. This finding is contrary to expectations generated by the UCT Readmissions Committee Assistance Officer (1997), who found that many of the students that she counselled from educationally disadvantaged backgrounds felt isolated and alienated at the university.

4.1.2. Minor Psychiatric Morbidity

* Twenty nine percent of students attending the SHS have possible MPM, as measured by the SRQ. This prevalence estimate falls within the mid-range of prevalence rates found in other studies in developing countries (8.3% [Freeman et al., 1991] to 69% [Oduowle & Ogunyemi, 1984]) and in line with prevalence rates indicated by Dhadphale et al. (1982)(25.8%), Kortmann (1990) (27%), Patel (1998) (27%) and Reeler et al. (1993)(26%).

* MPM is significantly related to a subjective sense of not feeling adjusted to university. Whilst this finding has a certain common sense value, it should be noted that no causality or directionality can be assumed.

* No relationship between MPM and gender was indicated. This is contrary to the findings of researchers such as Burvill and Knuiman (1983); Gove (1978); Vasquez Barquero et al. (1990); Verhaak (1995); Shepherd et al. (1966), but is similar to results obtained by some studies in developing countries (Dhadphale et al., 1983; Giel et al., 1968). It is not possible, given the pilot nature of this study, and its intention of providing a relatively undetailed overview, to provide reasons for these different findings.

* No relationship between MPM and 'race' was found in this study.

* Students manifested a relatively good understanding of their emotional difficulties A slightly higher percentage of students with MPM (14%) acknowledged affective symptoms than is generally reported in the literature (e.g. 7.8% by Goldberg & Blackwell, 1970; 10% by Goldberg et al., 1976).

* Contrary to the assertions of Horwitz (in Goldberg & Huxley, 1980) and Goldberg et al. (1976), no relationship between gender and reported emotional reasons for attendance at SHS was found in this study.

* Forty two percent of those who scored 8 or above on the SRQ have previously consulted, or are currently consulting, mental health professionals.

4.1.3. Exposure to trauma and the prevalence of PTSD

* Fifty two percent of students reported exposure (direct or indirect) to traumatic events. Twenty two and a half percent of these students reported having witnessed or experienced multiple traumatic events. This finding corroborates the observations and concerns of MHP's at the SHS.

* Eight and a third percent of reported traumatic events were experienced on the university campus. These included 15 incidents of a violent and intrusive nature (e.g. threats, sexual assaults, knife attacks, beatings, sexual harassment and shootings). Given the limitations of the research instrument, it is possible that these figures are an underestimation of the actual prevalence of traumatic events experienced on campus.

* Ten percent of the total sample were classified as currently manifesting symptoms of PTSD. Nineteen and a half percent of those who experienced trauma were classified as currently suffering from PTSD. Compared to the findings of other researchers (Davidson et al., 1991 [0.44%]; Kilpatrick et al., 1987 [5.6%]; Kilpatrick et al., 1989 [5%] {in Kilpatrick & Resnick, 1992}; Resnick et al., 1993 [4.6%]) a current prevalence of 10% for the total sample appears to be high, as is a 19.5% prevalence of current PTSD for those who have experienced trauma (Kilpatrick et al., 1987 [7.5%]; Resnick et al., 1993 [6.7%]). This might be partly accounted for by limitations in the questionnaire (see section 4.2.8.).

* No significant relationship was established between gender and PTSD despite Breslau et al's. (1991) finding of female sex as a risk factor for PTSD.

* PTSD in this study was found to be most strongly associated with sexual assault. This corresponds to the findings of Breslau et al. (1991); Kilpatrick et al. (1987); Kilpatrick et al. (1989); Norris (1992); Resnick et al. (1993).

* PTSD in this study was not shown to be higher overall for crime-related events than for non-crime-related events as found by Resnick et al. (1993). Limitations of the questionnaire might account for this difference (see section 4.2.8.).

* The strong relationship found between MPM and PTSD accords with an extensive literature on comorbidity (Bleich et al., 1997; Breslau et al., 1991; Davidson et al., 1991; Helzer et al., 1987; Kessler et al., 1995; Shore et al., 1989). See section 4.2.8.4. below for a discussion of problems related to comorbidity between PTSD, depression and anxiety.

4.1.4. Substance Abuse

* Nine and a half percent of the entire sample reported binge drinking either daily and/or weekly and 5.4% of the entire sample reported problem drinking either daily and/or weekly and/or monthly. Given the way in which alcohol abuse was measured in this study, it is difficult to compare these figures with those found in other studies. Given discrepancies in measurement, however, the prevalence of reported binge drinking in this sample is less than the 49% prevalence of risky drinking in UCT students found by Parry et al. (1994).

* The fact that no relationship was indicated between MPM and the frequency and extent of alcohol consumption was a somewhat unexpected finding, given the fact that depression and alcohol abuse are shown in the literature to be commonly associated (e.g. American Psychological Association, 1994; Camatta & Nagoshi, 1995; Deykin, Levy & Wells, 1987; Helzer & Pryzbeck, 1988; Kushner & Sher, 1993).

* Gender was shown to be moderately related to 'problem drinking'. Men manifest a tendency towards more frequent 'problem drinking'. This finding supports those of other research on young adults in South Africa (e.g. Flisher et al., 1993a; Morojele et al., 1997; Parry et al., 1994).

* 'Race' and alcohol consumption were shown to be quite strongly related. White students were shown to have the highest reported consumption of alcohol and Black students the lowest. This finding again correlates with the findings of research on alcohol consumption amongst youth and young adults in South Africa (e.g. Eide & Acuda , 1995; Flisher et al., 1993a; Morojele et al., 1997; Parry et al., 1994).

* The frequency and extent of alcohol consumption and interference with academic work requirements were shown to be related. Those who reported drinking daily feel that alcohol consumption interferes with their academic performance. Those who reported 'binge drinking' daily and weekly feel that their alcohol consumption interferes with their academic work requirements. Reported daily, weekly, monthly or even infrequent 'problem drinking' was shown to cause interference with academic performance. These findings corroborate those of international research (e.g. Nystrom et al., 1993; Yamada et al., 1996).

* Approximately 5% of students reported smoking cannabis daily or weekly, 4% monthly and 13% less often.

* Four percent of students reported having used single or multiple 'hard drugs' in the last year.

* Whilst cannabis consumption and use of other illicit drugs is neither related to MPM nor to gender in this sample, they were found to be weakly related to 'race'; White students reported using cannabis most frequently and report the highest use of other illicit drugs. The lack of gender disparity differs from the findings of Flisher et al. (1993b) and Rocha-Silva (1991b) who indicate that males reported a greater drug use than did females. It also contradicts the findings of Flisher et al. (1993b) that Black males report the greatest drug usage.

4.1.5. Detection of psychiatric difficulties by medical personnel

* A detection rate of MPM (based upon the HSR) of 25% was found. There was therefore a 75% rate of 'hidden psychiatric morbidity' compared to the findings of the SRQ. This accords with research by Freeman et al. (1991) who found a detection rate of less than 33%. However, the detection rate is higher than those indicated by Hall and Williams (1987)(4.25%) and Abiodun (1989) (14.6%). Rates of detection increased as SRQ scores increased and this accords with Ormel et al's. (1991) findings that detection rates for severe disorders are higher than those for less severe disorders.

In the context of this research, it is essential to remember that no second stage criterion was utilized to validate the findings of the SRQ. Thus, the 'cases' identified by the screening questionnaire remain only as *possible* 'cases'. Moreover, as Rumble (1994) indicated in her well validated research in Mamre, the SRQ has a tendency to establish 'false-positives' (see section 4.2.2.). Thus, the 29% prevalence rate of MPM found in this study may be an overestimation of the true prevalence of MPM. Given the tendency found in other studies (Abiodun, 1989; Casey et al., 1984; De Jong et al., 1986; Freeman et al., 1991; Hall & Williams, 1987; Mari & Williams, 1984; Ormel et al., 1991; Von Korff et al., 1987; Williams et al., 1986; Zung et al., 1983) for general health practitioners to underdetect psychiatric morbidity, it may therefore by suggested that the 'true' prevalence of MPM probably lies somewhere in between the 29% prevalence established by the SRQ and the 7% prevalence established by medical practitioners.

Ormel et al. (1990) argue, moreover, that

> when a GP does not record a psychiatric disorder in a patient, this not necessarily implies that the GP is unaware of the psychological distress of the patient. The GP might even be aware of a possible psychiatric disorder but may consider psychological labelling and/or mental health treatment inappropriate or inexpedient. For instance, the GP might think that the psychiatric disorder will remit spontaneously or is untreatable, that labelling and treatment may do more harm than good, that treatment is not feasible due to time or financial constraints or patient's willingness to accept a biopsychosocial re-interpretation of physical complaints or a referral

to a mental health specialist, or that psychiatric disorders are outside the realm of GP's competence or responsibility' (p. 920).

They go on to state that whilst 'some of these factors might explain why particular psychiatric disorders are not recognized by GP's...it is very likely that at least part of the non-recognition is real and due to a lack of diagnostic vigilance and skills and time constraints...' (p. 920).

* Of 129 students scoring above 8 on the SRQ, 16 (12%) were referred to the Mental Health services at the SHS. This percentage rates well against the findings of Shepherd et al., (1966) (5.1%).

4.2. LIMITATIONS OF THE RESEARCH

Whilst not necessarily a limitation, it needs to be noted that this study was explicitly undertaken as pilot research. As such, it presents a broad overview of factors relating to mental health in a general health care context and offers, therefore, only the broadest results.

4.2.1. Use of a one stage screening

In epidemiological research, the methodologically correct procedure for establishing prevalence rates of psychiatric morbidity is to undertake a 2-stage study. Results of screening instruments (such as the SRQ) that is, should be compared against assessments made by specialist mental health practitioners or against a gold standard such as the PSE.

Such a procedure addresses the propensity of screening instruments to, depending upon the particular context in which they are utilized, falsely identify positive cases (false positives) or to fail to identify positive cases (false negatives).

Use of a gold standard, moreover, enables the calculation of validity coefficients (such as sensitivity, specificity and overall misclassification rates - see Chapter 2 section 2.4.1.1.1.) particular to specific contexts and thereby allows calibration of the screening instrument for the population under study.

Whilst Parry (1996) criticizes studies which rely upon validity estimates arrived at in other contexts and cut-off points used in studies in different contexts, it needs to be acknowledged that 2-stage studies are both expensive and time-consuming undertakings - factors which prevent research into the prevalence of psychiatric morbidity in contexts where major (often international) funding is not available. In such contexts, there is certainly an argument for undertaking pilot research using validity coefficients and cut-off points arrived at in related contexts. This having been said, the pilot nature of such research, and possible resulting errors in prevalence estimates, must be taken into consideration.

4.2.2. Use of the SRQ based upon validity estimates arrived at by Rumble (1994)

As previously stated (Chapter 2, section 2.4.1.1.1.) this study relied upon validity estimates arrived at in the most relevant recent and methodologically sound research undertaken in a South African context (Rumble, 1994). Rumble (1994), in her community study in Mamre, established a sensitivity for the SRQ of 71% and a specificity of 65% - a compromise between sensitivity and specificity scores indicated an optimal cut-off point of 7|8. Weighted to the original sample, sensitivity fell to 0.49 and specificity rose to 0.82. Based upon results obtained using the PSE, the SRQ was shown to be able to correctly identify 67% of cases and non-cases with a false positive rate of 23% and a false negative rate of 10%. In Rumble's (1994) study, therefore, the SRQ had a high false positive rate and a low false negative rate. This accords with Parry's (1996) observation that screening instruments in general tend to over-estimate prevalence and that the decision to use a screening-instrument alone frequently results in an over-estimation of prevalence rates.

Though Rumble's (1994) study was the most recent study in which the SRQ was validated in the South African context, it should be noted that this research was community based. Clinic studies using the SRQ in South Africa (e.g. Freeman et al., 1991; Miller, Swartz & Rumble, 1991) have not mentioned validity coefficients. Recent clinic studies in other developing countries (Araya et al., 1992; El Rufaie & Absood, 1994; Mari & Williams, 1985; Sen & Williams, 1987) arrived at overall misclassification rates of 25%, 24%, 18% and 23% respectively. These are slightly lower than the 33% overall misclassification rate arrived at by Rumble (1994).

Robins (1985) suggests that in community studies sensitivity is expected to be lower.

Although emphasis is placed upon establishing the validity of the SRQ, it is also necessary to note that, without a second stage assessment, the validity of questions assessing PTSD also remains questionable. Other problems with questions assessing PTSD will be discussed in section 4.2.8.

4.2.3. Timing of research

It should be noted that the prevalence of MPM established in this study may have been influenced by the timing of the data collection. Study week for mid-year examinations began during the data collection period (June 1) and examinations shortly thereafter (June 8). There may have been a conflation, therefore, between a 'case' of psychiatric disorder and a normal response to academic stress.

4.2.4. Content validity of SRQ items 21-25

The SRQ-25 was administered in this study but only the SRQ20 was analysed. The reasons for this are outlined in footnote 37 in Chapter 3, section 3.3.1. As Beusenberg and Orley (1994) indicate, the psychometric properties of the questions about psychosis (questions 21-24) (e.g. their sensitivity, specificity and content validity) have not been assessed. A brief overview of answers given for these questions, and the response of students to them, contributed to the decision to eliminate them from analysis. For instance, given the high exposure of students to violent crime, it is by no means self-evident that answering question 21 (*Do you feel that somebody has been trying to harm you in some way?*) affirmatively suggests paranoid delusions. This argument has serious implications for the content validity of such a question in the South African context. Questions regarding content validity of item 22 are supported by the fact that 180 (40%) of students answered question 22 (*Are you a much more important person than most people think?*) affirmatively. The same reservations apply to question 23 to which 21% of students answered affirmatively. Question 24 appears to be far more discriminatory with 5% of students answering affirmatively.

The scoring protocol of SRQ25 requires that any affirmative answers to questions 21-24 should result in a classification of MPM. Thus, based upon answers to question 22 alone, 40% of the sample would be classified as scoring positively on the SRQ. The gross overestimation that this would imply is supported by the fact that the DSMIV (American Psychiatric Association, 1994) estimates the lifetime prevalence of schizophrenia to be between 0.5% and 1%, the lifetime prevalence of schizophreniform disorder to be around 0.2% and about 0.03% for delusional disorder.

The utility of item 25 in a questionnaire assessing MPM is debatable. It appears that many researchers tend to utilize the SRQ20 (e.g. Petersen et al., 1996; Rumble, 1994) or the SRQ24 (i.e. excluding item 25) (e.g. Harding et al., 1980; Harding et al., 1983; Kortmann & Ten Horn, 1988). However, some researchers (e.g. Freeman et al., 1991) utilize all 25 items. Freeman et al. (1991) used the following scoring protocol - participants were rated as suffering from MPM if they scored 10 or above on the SRQ20 *or* if they obtained one positive item on the SRQ5. The implication of this is that a person suffering from fits and convulsions becomes classified as suffering from MPM. This is a highly questionable and problematic finding since it immediately and uncritically classifies all persons who experience fits and convulsions as mentally ill.

4.2.5. Questions assessing adjustment to university, academic performance and financial coping

These questions were entirely subjective and extremely general. Answers to these questions, therefore, can only provide a crude understanding of issues relating to adjustment, academic and financial coping.

4.2.6. Racial classifications

As already noted, asking for racial classifications, given South Africa's apartheid history is sensitive and potentially problematic. Four students specifically noted that they refused to answer such a question because they found it discriminatory or irrelevant. Another 2 answered the question but noted their objections.

4.2.7. Question gauging students' reported reasons for attending SHS

This question proved to have questionable validity since it tended to be wrongly interpreted by students; many understood it as asking why they had decided to come to SHS as opposed to another medical facility. The question needed to be more specific, for example, 'what do you think is wrong with you?'

4.2.8. Problems with questions assessing trauma and PTSD

4.2.8.1. Matching of PTSD assessment with DSMIV (American Psychiatric Association, 1994) criteria

Although the assessment of PTSD was closely based upon DSMIV (American Psychiatric Association, 1994) criteria, some differences did exist.

4.2.8.1.1. The 'Criterion A issue'

Although this research utilized DSMIV (American Psychiatric Association, 1994) criteria for PTSD, it specifically broadened Criterion A (this has been extensively discussed previously in Chapters 1 and 2 sections 1.3.2.3.1. and 2.4.1.2.).

This questionnaire, moreover, did not allow documentation, and therefore analysis, of specific characteristics of traumatic events. No differentiation, for instance, was possible between direct (experienced) and indirect (witnessed) trauma. Although Kilpatrick and Resnick (1992) propose that the rates of PTSD associated with witnessing an event are comparable with those associated with experiencing an event, a further exploration of this issue in the particular context of this study would be interesting. Furthermore, analysis of specific characteristics of traumatic events was not possible. Kilpatrick et al. (1989) found that perception of threat to life, physical injury and completed rape significantly predicted development of lifetime PTSD. As Resnick et al. (1993) assert, therefore, 'reliable and valid assessment must be conducted to assess accurately both specific types of crimes and critical elements of crimes that, in turn, will affect PTSD prevalence rates' (p. 984).

This questionnaire provided broad and fairly unspecific categories of traumatic events. For instance, sexual assault in this study might include harassment, molestation, child abuse, attempted rape and completed rape. Resnick et al. (1993) argue that, by failing to accurately define traumatic events, researchers do not

obtain satisfactorily detailed understandings of exposure to trauma and the relationship between specific traumatic events and PTSD. They postulate that

> the use of global legal terms such as 'rape' to identify sexual assault crimes leads to vast underestimations of true population rates that are observed when the same incidents are asked about using specific questions about occurrences of vaginal, oral or anal penetration that are unwanted by the victim and that happen as a result of force or the threat of force by any other person regardless of relationship to the victim (p. 985)..

4.2.8.1.2. The issue of duration and PTSD

The questionnaire utilized for this research did not require, as does the DSMIV (American Psychiatric Association, 1994), that the duration of PTSD symptoms be more than a month. However, it is suggested by some authors (Gersons & Carlier, 1992; Kilpatrick & Resnick, 1992) that the duration of one month of symptoms stipulated by the DSMIV (American Psychiatric Association, 1994) is arbitrary and has no empirical basis.

This questionnaire, moreover, did not enable the classification of symptoms as chronic or acute or of delayed onset. By asking when the trauma occurred, a rough estimation of chronicity was obtained. However, since the questionnaire did not ascertain the time of the onset of symptoms and could not, in the case of multiple traumatic events, differentiate between the relationship of PTSD symptoms and particular events (see section 4.2.8.2.) an analysis based on this information remains of limited utility. Moreover, although it was assumed to be measuring current PTSD, it may be argued that it did not adequately differentiate between lifetime prevalence and current prevalence. In order to do so, a more explicit instruction to students to regarding the experience of symptoms in the last 6 months (or ever) was required.

4.2..8.1.3. Omission/conflation of DSMIV (American Psychiatric Association, 1994) criteria

The questionnaire used in this study conflated criteria D 4 and 5 (hypervigilance and exaggerated startle response) of the DSMIV (American Psychiatric Association, 1994) into the question - 'are you jumpy and easily startled?'. Moreover, for criteria

C4 (markedly diminished interest or participation in significant activities) this questionnaire used the SRQ item 11. It could be argued that item 15 was equally appropriate and that, perhaps, affirmative answers to both items should have been required.

4.2.8.2. Linking of PTSD symptoms with specific traumatic events

In cases of exposure to multiple traumatic events, this questionnaire did not allow PTSD symptoms to be linked with specific traumatic events. Resnick et al. (1993), however, suggest that there are benefits to this method of assessment since 'it does not require insight on the part of the respondent about symptom-event correspondence and ...allows for straightforward assessment of symptom presence in individuals who may have experienced multiple traumatic events.' (p. 986).

4.2.8.3. Linking of traumatic events to specific locations

In cases of exposure to multiple traumatic events, this questionnaire did not allow particular events to be linked to specific locations.

4.2.8.4. PTSD as a discrete entity

It has been pointed out by some authors (e.g. Davidson & Foa, 1991) that the symptoms of PTSD as outlined in the DSMIV (American Psychiatric Association, 1994) overlap with those of other psychiatric disorders such as depression and anxiety. This raises questions about the validity of measuring PTSD as a discrete diagnostic entity. It may be argued that if a participant scored above 8 on the SRQ, he/she was more likely to obtain a diagnosis of PTSD. It needs to be asked, then, whether, in cases where a participant obtains a diagnosis of MPM on the SRQ, together with a diagnosis PTSD, co-morbidity can be assumed or whether, in fact, this questionnaire is merely duplicating a diagnosis of the same disorder. This, however, is a question which goes beyond this research to major diagnostic classifications such as that promoted by the American Psychiatric Association (1994).[52] (See Chapter 2, section 2.4.1.8.1.[a]).

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[52] *See Chapter 3, section 3.4.6.*

4.2.9. Problems with questions assessing substance abuse

It is well established in substance abuse research that alcohol intake is frequently under-reported in interviews and questionnaires and that heavy drinkers tend to underestimate their consumption (Nystrom, Perasalo & Salaspuro, 1993; Pernanen, 1974; Poikolainen, 1985). This factor needs to be taken into consideration when assessing the prevalence of alcohol abuse and risky drinking in the research.

Regarding questions assessing substance abuse, moreover, issues related to timing were not assessed adequately. For research purposes it is usually required that behaviour such as 'binge drinking' has taken place within the past 2 weeks; no such qualification, however, was included in this questionnaire.

In order to facilitate comparison with other research, assessment of risky drinking/alcohol abuse could have been more standardized. For instance, the most utilized definition of risky drinking in South African research is the consumption of 5 or more drinks at least once in the past 14 days (See Chapter 2, section 2.4.1.8.1.[b]).

4.2.10. Ethical problems

It is suggested, in retrospect, that it may have been beneficial to include an offer, at the end of the questionnaire, for students to discuss feelings evoked by the questionnaire with their doctor, nurse or a MHP.

4.3. RECOMMENDATIONS

Despite this study's specific focus upon the prevalence and detection of MPM in students attending the general medical services at the UCT SHS, the major recommendations arising out of this research extend beyond the SHS itself and address the broader issue of mental health services offered to students at the university. Such tangentiality is justified considering the relatively high prevalence of MPM (29%) found amongst students attending the general health services of the SHS. As previously mentioned, this percentage prevalence rate, given the methodological limitations of the study, might be an overestimation. However, even if the percentage prevalence rate is considerably lower [53], it would be high enough to indicate that mental health issues for students at UCT should be a carefully considered policy issue. This need is compounded, and focused, by a 52% exposure amongst the sample attending the SHS to traumatic events and a current prevalence of PTSD of 10%. Currently, UCT has no *integrated* policy or programme addressing students' mental health needs. Students' mental health needs are partially addressed in various other policies, such as those relating to sexual harassment and HIV and AIDS (UCT Department of Development and Public Affairs, 1997a, 1997b).

A question raised by the above-mentioned results, which has implications for mental health services at UCT, is the relationship between prevalence of MPM amongst clinic attenders and the prevalence of MPM in the broader community (in this case, the entire student community at UCT - approximately 15500 students [according to enrollment figures in 1997 {Ramphele, 1997}]).

Goldberg and Huxley (1992) suggest that many persons with psychiatric morbidity never come to the attention of primary health care services and therefore that prevalence estimates based on clinic attenders alone do not truly reflect the total psychiatric morbidity of a given community. Parry (1996), in a review of 24 studies

[53] *If a prevalence rate of 10% had been found , approximately 52 students attending the general medical services of the SHS between May 26 and June 11 could be considered to be suffering from possible MPM.*

conducted on adult clinic attenders or community samples shows that the prevalence of MPM is roughly the same in the clinic and community samples. In the only research available in South Africa which estimates prevalence in a clinic sample and its related community, a 45% prevalence was found in the clinic sample (Miller & Swartz, 1991) and a 27% prevalence in the community (Rumble, 1994). However, methodological problems related to the clinic study suggest that the prevalence estimate of 45% is an overestimation.

However, even assuming that prevalence in the community is 0.6 times that of prevalence in clinic attenders (based upon estimates obtained in studies in Mamre [Miller & Swartz, 1991; Rumble, 1994]) this would suggest that 17.4% of the UCT student community is suffering from MPM (approximately 2700 students). Approximately 4% of all students attend the SHS (at the time this study was conducted) and 29% of these are suffering from MPM (i.e. approximately 162 students). Therefore, only about 6% of UCT students with mental health difficulties are presenting at the general medical services of SHS and 8.5% are presenting at the general medical services and mental health services combined (2.5% attending mental health services).

In addressing the above-mentioned issues, UCT requires an integrated policy for students' mental health needs which underpins an integrated, accessible and well marketed mental health programme. In addition to supportive and treatment based interventions emphasis should be placed upon education about mental health issues, with a preventative and destigmatizing focus (Arnstein, 1990). Furthermore the nature of supportive and treatment based interventions should be broadened beyond individual counselling in order to meet the needs of a greater number of students. The relationship between MPM and poor adjustment to university promotes interventions in both directions.

Prior to discussing structural issues related to the planning of services, a brief digression into the relationship between 'caseness' and the need for treatment is required. Copeland (1981) suggests that 'caseness' depends upon the form, severity and duration of the condition as well as upon the necessity for treatment. In measuring 'caseness', he argues, a researcher must be aware that

> the division of subjects into cases and non-cases is a classification, and like all classifications it is man-made and not in nature. It is a concept created for a purpose and is useful only in so far as it serves that purpose...[thus]...there will be as many classifications of a case as there are purposes (p. 10).

Therefore, if the purpose of research is to determine the need for treatment by a MHP, the definition of a case might be quite different from that definition used to establish a prevalence estimate of MPM for comparative purposes.

It should be noted that the measurement of caseness by the SRQ utilizes criteria of the form and, to some extent, the severity of a condition. What it does not tell us, however, is anything regarding the duration of a condition, the necessity for treatment and the nature of appropriate treatment.

The epidemiological concept of the 'natural history' of a disease/disorder refers to the course of a disorder from inception to resolution. Once clinically manifest, a disorder may continue inexorably, be subject to remission and relapses or remit spontaneously (Last, 1988). Without any knowledge of the duration of disorders and specific factors which may facilitate spontaneous remission, we cannot ascertain accurately the relationship between a prevalence estimate of MPM and the probability of and timing of spontaneous remission (referred to as 'restitution' by Goldberg and Huxley [1992]). We may assume, however, that a certain percentage of measured cases will, within a short period, remit spontaneously without treatment. Goldberg and Huxley (1992) assert that

> investigators who have carried out validity studies of psychiatric screening questionnaires invariably discover a substantial group of patients who are 'false positives' on the test: that is to say, they have high scores but they do not reach research criteria for a diagnosis. Such patients are usually experiencing the symptoms which they have reported on the test, but either the disorder has not yet lasted long enough to satisfy the minimum duration

> required for a diagnosis, or the patient does not have quite enough symptoms for a diagnosis. These patients are often thought to be experiencing understandable minor adjustment reactions to stress, or to be mildly defensive people who are reluctant to discuss their psychological symptoms with another person...Considerable numbers of patients with disorders that just reach criteria for a diagnosis will in fact remit over the next month...(pp. 114-115).

Research by Goldberg and Williams and Tennant et al. (1988 and 1981 in Goldberg & Huxley, 1992) indicates that spontaneous remission may be predicted by scores just above threshold on an initial screening instrument, by recent onset, a recent 'peak' of the disorder (i.e. they were already improving), by recent threatening life events/short term social crises and by recent 'neutralizing' or 'fresh start' life events and by high levels of social support. The remission process is hindered by physical illness, a past history of psychiatric illness, poor coping abilities and long-standing social difficulties (Goldberg & Huxley, 1992). Lin and Ensel (1984 in Goldberg & Huxley, 1992) measured depression at 2 points in time. They found that of those depressed at time 1, forty three percent were depressed at time 2.

On the other side of the coin, a percentage of those who are not classified as cases may be in remission and will shortly relapse. A measurement of 'caseness' as used in this study, moreover, gives us no information about the nature of treatment required and the degree of severity worth treating. It is conceivable, also, that some percentage of those measured as 'cases' will alleviate their symptoms by seeking interventions outside the realm of mental health services (e.g. relatives/friends/ religious leaders etc.).

Data regarding the natural history of MPM can be obtained partially from what is already known through epidemiological studies in other contexts. Specific research pertaining to the population being studied, however, would also be beneficial.

Blazer (1995) asserts that natural history studies of mood disorders indicate that severe symptoms are associated with less likelihood for recovery and that relapse rates are high for major depressive disorder immediately following recovery. A history of 3 or more major depressive episodes are associated with relapse. As

previously stated, moreover, depression and anxiety are frequently comorbid. Hagnell (1970) suggests that the average duration of episodes of neurosis (excluding the neuroses of old age) is about 6 to 7 months. For patients with ages ranging between 20 and 60, 40% of episodes have a duration of less than 3 months and 70% of less than 6 months. Only 4% have a duration of more than 3 years. Many neuroses have a limited course, even if untreated. However, with regard to mood disorders, even though the initial episode may resolve, there is a risk for subsequent episodes. Moreover, early identification and treatment of early depressive symptoms may prevent the development of a full depressive episode. Thus, even those participants who scored below 8 on the SRQ might benefit from treatment.

The recommendations outlined below require consideration in light of the above-mentioned comments. Further research, moreover, where 'caseness' is defined in terms of treatment required, is necessary in order to fully understand the implications of this research and the related recommendations.

4.3.1. The need for *integrated, accessible and well marketed* mental health services

Mental health services at UCT are fragmented (see Chapter 1, section 1.3.5.1.) and often poorly marketed, and this, it may be suggested, reduces both their effectiveness and accessibility to students. For a student experiencing mental health related difficulties, it may be argued, it is far from self evident where they should seek help. Whilst the Careers Office widely distributes pamphlets and newsletters advertising their services, the other facilities mentioned in Chapter 1, section 1.3.5.1. rely upon referrals and input given to students during their initial orientation to UCT. It is perhaps noteworthy that UCT's home page on the internet (http://www.uct.ac.za) provides virtually no information on student counselling services. Psychotherapy is included amongst a list of services provided by the SHS in a short, not easily located, paragraph about the service (Broek, 1996). A similarly difficult to find paragraph on the Student Advice Office includes 'counselling by social workers [for]...family and personal problems' amongst its list of services (Broek, 1996) (see Appendix 18 for examples of internet information about counselling services at some other universities). It is suggested that greater exposure is given to available on-campus services. Additionally, more exposure

needs to be provided on campus and in residences of mental health facilities in the Western Cape (such as Lifeline, Rape Crisis, Nicro, SANCA and the Drug Counselling Centre).

In order to prevent repetition of services, and to provide a more accessible mental health programme for students, UCT requires an integrated mental health service. Practically, it may be argued, this service requires a central, and well marketed, point of intake responsible for specialized referrals.

Given the finding of a 52% exposure to traumatic events and a 10% current prevalence of PTSD symptoms emphasis should be placed upon providing trauma related counselling. The exact nature of such counselling should depend upon a growing body of literature addressing interventions for trauma victims (e.g. see Figley, 1985; Van der Veer, 1998). Regarding different forms of therapeutic intervention for trauma victims, Reeler and Mbape (1998) assert that little meaningful comparative outcome work has been undertaken and it is therefore difficult to obtain a clear idea of the relative efficacy of various approaches. Moreover, most treatment studies have focused upon ex-combatants as opposed to victims of civilian trauma.

A recent study in Zimbabwe (Reeler & Mbape, 1998) indicates the effectiveness of a single therapeutic intervention for patients with chronic psychological disorders due to torture. This interview covered both de-briefing of the trauma and trauma symptoms and problem solving of current life problems. Due to the absence of either a control group or a comparison with another form of treatment, the success of such an intervention cannot be conclusively determined. However, it has obvious cost benefits. [54]

[54] *for more information on the single therapeutic interview for trauma patients, see Staehr and Staehr (1995) and Straker (1987).*

An important issue which requires consideration in providing adequate services for students who have been exposed to traumatic events is that of the efficacy of and necessity for immediate post-trauma counselling. Van der Veer (1998) suggests that such a service is beneficial since it enables the survivor to obtain information regarding PTSD symptoms and to correct misunderstandings and mobilize adaptive coping skills at an early stage. Moreover, it enables the counsellor to set limits on self-destructive behaviour. Gillis (1993) concurs that ' the hours and days after a traumatic event are a key time for mental health intervention...[since] intervention at this point may enhance effective coping strategies and prevent longer term maladaptive resolutions' (p. 169). In considering immediate post-trauma counselling, the technique of Critical Incident Debriefing should be explored. Yule (1994 in Herbert, 1996) cautions, however that 'given the few evaluative studies of debriefing, and the assumption that individuals will adapt to crises at different rates, care must be exercised before offering debriefing as a panacea to all survivors.' (p. 13). The high percentage of students who have been exposed to trauma indicates, also, the necessity of promoting Western Cape based organizations dealing with trauma as well as programmes to protect students in the university environs. The latter intervention, as stated previously, is already a priority at UCT, particularly, and justifiably, given the results of this research with regards to sexual harassment and assault. Campus Control provides a Student Protection Service from 19h00 to 01h00 for students who feel unsafe and need an escort from one part of campus to another (UCT International Academic Programmes Office, 1997).

The development of an integrated mental health for students policy and programme at UCT may be facilitated by the appointment of UCT's first Dean of Students, Dr. Mathabe, a counselling psychologist some months after the data for this study was collected (September 1998). Her brief is to restructure the Student Affairs Department under which the SHS and the Student Advice Office currently fall. The new restructured department will be called the Student Development and Services Department (SDSD) (see Chapter 1, section 1.3.5.1.). Indeed, the Monday Paper [55] (New Dean of Students to foster Student Development, 1998) reports that 'Dr. Mathabe said her main challenge initially as Dean of Students would be to integrate the University's disparate student services.' (p. 2).

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[55] *An internal newspaper produced by the UCT Public Relations Department*

4.3.2. The need for *educational* and *preventative* programmes

Fourteen percent of students who scored 8 and above on the SRQ and who were seeking medical assistance at the SHS acknowledged affective symptoms. Forty two percent of those who scored 8 or more on the SRQ had previously/or were currently consulting MHP's [56]. Thus, a large number of students were 'unaware' or did not acknowledge emotional difficulties and approximately half of the students with mental health difficulties had never or were not seeking mental health assistance.

It may be argued, thus, that students at UCT need to be 'educated' about mental health difficulties. It is suggested that mental health issues move beyond the academic environment of the Psychology Department and the clinical environments of the mental health division of SHS and the other facilities which offer mental health interventions on campus. MHP's aligned to the student mental health programme, therefore, should, besides a clinical function, undertake an educational function on campus (Arnstein, 1990). Informative interventions on campus and in residences addressing mental health issues (e.g. poster displays, lunchtime talks in accessible venues, the distribution of leaflets, information provided on the internet as part of a UCT student counselling service homepage [see examples in Appendix 18 - specifically the 'outreach program' offered by Auburn University {Auburn University Student Counseling Services, 1999}]) will serve the purpose of both educating students about mental health issues and may also, to some extent, through sensitive exposure, destigmatize such issues.

[56] *A 42% current or previous consultation with MHP's amongst students attending the general medical services of the SHS who scored 8 or more on the SRQ is high. Without further research, it is difficult to conclusively explain such a finding. However, a number of possibilities may be suggested:*
1) It is conceivable that people who use services for one problem (i.e. somatic complaints) are more likely to use services for other problems (i.e. for mental health related complaints).
2) It is possible that, as a population, students are more likely to know about, have access to and, therefore, utilize mental health services.

Educational interventions, it should be noted, may also serve a preventative function. Although the 9.5% prevalence of binge drinking in this sample was lower than that found by Parry et al. (1994) in a similar population it is significant enough to warrant attention. In 1997, the SHS embarked upon a campaign to reduce alcohol use and abuse on campus. This involved having a member of Alcoholics Anonymous to staff the student health table during orientation week in 1997, referrals of students to Alcoholics Anonymous, a poster campaign in residences (see Appendix 19), lobbying over UCT radio, liaising with wardens in UCT residences, an alcohol awareness week involving talks and debates (with the theme of 'think before you drink'), training of the members of residence house committees to intervene appropriately when necessary (Dr. Z. Jaffer, SHS, personal communication, January 15, 1999). This campaign, however, lapsed somewhat during 1998 owing to shortage of humanpower and consequent time pressures. SHAWCO and the Rag Committee currently undertake the 'buddy up' campaign. This involves offering students the option, at parties, of handing in their car keys and receiving a breathalizer test before having their keys returned. If their alcohol levels are above the acceptable limit the students are escorted home. Moreover, in 1998 a decision was taken that no alcohol could be sold on campus; all parties, therefore, take place off campus. South African Breweries, however, still subsidizes alcohol at UCT parties (1999 Rag Committee Chair, personal communication, January 18, 1999). The effects of such campaigns may, at least partially, explain the lowered figures found in this study.

Parry and Bennetts (1998) suggest 3 forms of prevention for alcohol misuse - primary, secondary and tertiary [57]. They suggest that health education be included as part of efforts at primary prevention (see chapter 5 of Parry and Bennetts [1998], as well as Glanz, Lewis and Rimer [1997] for details on health education).

[57] *'Secondary prevention of alcohol misuse refers to intervention efforts aimed at people who are at risk from problem drinking...tertiary prevention refers to strategies aimed at those who already have a drinking problem and where intervention (treatment and/or rehabilitation) is needed to deal with the acute or chronic effects of dependence or abuse' (Parry & Bennetts, 1998, p. 159).*

It is suggested that preventative and educative campaigns about the effects of both alcohol and drugs continue to be implemented on campus. Students themselves could become involved in such educational/preventative campaigns as part of their coursework. For instance, as part of their training in community based work, honours students in the Psychology Department might undertake a psychoeducational campaign on campus or preventative campaigns such as informing students of the hazards of drug and alcohol abuse. Preventative workshops run by MHP's aligned with the student mental health programme could cover such issues as managing exam stress, communication skills, learning skills (see Appendix 18 section 3 for 'workshops and specialized programs' and 'learning strategies and resources' offered by Queen's University Student Counselling Service [Student Counselling Service, Queens University, 1996]). In terms of implications for the SHS specifically, given that many of the students attending the service for medical reasons have mental health difficulties, more exposure within the SHS is recommended.

Education, it is suggested, needs to extend beyond the education of students to the education of general health practitioners and academic staff (Arnstein, 1990). Regarding general health care practitioners, as already stated, no real conclusions can be drawn regarding the detection of mental health difficulties until a second stage study is carried out, but it is likely that some underdetection is taking place and further education on mental health issues is warranted. Academic staff would benefit, it is suggested, from input on when and where to refer students, as well as the association found in this study between MPM and difficulties adjusting to university. As part of their policy on HIV infection and AIDS, UCT offers courses on counselling skills to staff or students who might be approached for advice, help or support by a colleague or student living with HIV or AIDS. These courses are available to all interested members of the university community without charge. (UCT Department of Development and Public Affairs, 1997a). It is suggested that such training is extended to training on broader mental health issues (see Appendix 18 part 4 for the 'consultation' program offered by Auburn University [Auburn University Student Counseling Service, 1999]).

4.3.3. The need for group interventions

Financial and humanpower constraints at facilities offering mental health services to UCT students are acknowledged and it is within this context that supportive and treatment based interventions need to be considered. Individual therapy, whilst it certainly has a place, is time consuming, expensive and labour intensive. It may be argued, therefore, that more emphasis needs to be placed upon group interventions. The SHS, Child Guidance Clinic and Student Advice Bureau, it is suggested, could run groups, for instance, for students who have experienced sexual assault/harassment, students who have been exposed to traumatic events,[58] students having difficulty settling in residences or at UCT in general and so on. (See Appendix 18 part 4 for group interventions offered by Auburn University [Auburn University Student Counseling Service, 1999]) [59]

4.3.4. The need for further research

The pilot nature of this study opens up many channels for future research. These include the following:-

* A study of the prevalence and detection of MPM at SHS using a second stage criterion. Such a study would enable a more exact idea of the prevalence of minor psychiatric difficulties amongst students seeking general medical services, as well as a more accurate understanding of the detection of MPM by medical practitioners.

* Research on the natural history of MPM amongst students attending the general medical services of the student health service would be beneficial. Such research might include information on spontaneous remission, as well as resources that students might be using to address their mental health difficulties (i.e. besides formal mental health services). A needs assessment of what students feel they need with respect to university mental health services, their awareness of what is available and whether these services currently meet their needs could be undertaken.

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[58] *Gillis (1993) suggests that 'healing after a trauma is facilitated when ...[survivors] feel supported by their peers and when they can talk with others who have had similar experiences.' (p. 173). It should be noted that Gillis (1993) is writing specifically about interventions for children who have experienced trauma but the principles can be extended to adults. See Gillis, 1993, p. 174 for more details regarding group work for trauma survivors*

[59] *One intern at the Child Guidance Clinic each year already runs a group at the SHS which meets once weekly.*

* Given the relationship found in this study between MPM and poor adjustment to university, further research on factors affecting adjustment and on the relationship between MPM and adjustment could fruitfully be undertaken.

* The research on exposure to trauma undertaken in this study could be 'streamlined' by accessing accurate details on duration and time since the traumatic event.

* The research on substance abuse undertaken in this study could be improved upon, and thereby rendered more useful, by utilizing criteria for 'risky drinking' used by other studies in South Africa (e.g. Parry et al., 1994)..

* Given the findings of this research regarding the utility and criterion validity of questions 21 -25 of the SRQ, further research on the use of these items in South Africa would be useful.

4.4. CONCLUSION

The recommendations generated by this research have, to a large extent, led away from the services offered by the SHS. To return to these, briefly, however, a few responses to the question '*why have you come to student health*?' will be quoted. Students reported that they find the service 'user-friendly', 'effective' and 'a very approachable place'. They stated that they feel 'comfortable' with the doctors and nurses, that they receive 'good advice and good after-sales service', that the 'doctors here are very nice and loving' and that 'the doctors and nurses are friendly and understand students' problems'. One student reported that he/she has 'the confidence that I will be helped' and another that 'I have been twice before and the treatment I received was very good'.

This research was structured as a pilot study to assess the prevalence and detection of MPM amongst students attending the general medical services of the UCT SHS. Despite the broad nature of this research and its methodological limitations, a number of important findings were obtained. This research highlighted the relatively high prevalence of MPM amongst students at UCT, the high exposure of UCT students to traumatic events and patterns of substance abuse. All of these issues have implications for the structuring of mental health services at UCT.

Furthermore, this research suggests the necessity for further research, both into mental health issues of students at UCT and into the use of the SRQ as a screening instrument for psychiatric morbidity in South Africa.

REFERENCES

Abiodun, O. A. (1989). Psychiatric morbidity in a primary health care centre in a rural community in Nigeria. The Central African Journal of Medicine, 34, 372-377.

Almeida-Filho, N. (1987). Social epidemiology of mental disorders: a review of Latin-American studies. Acta Psychiatrica Scandinavica, 75, 1-10.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders. (3rd ed.). Washington D.C.: Author.

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders. (3rd ed. - revised). Washington D.C.: Author.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders. (4th ed.). Washington D.C.: Author.

American Psychological Association. (1984). Final report of the task force on the victims of crime and violence. Washington D.C.: Author.

American Psychological Association. (1994). Publication manual of the American Psychological Association. (4th ed.). Washington D.C.: Author.

Araya, R.I., Wynn, R., & Lewis, G. (1992). Comparison of 2 self-administered psychiatric questionnaires (GHQ12 and SRQ20) in primary care in Chile. Social Psychiatry and Psychiatric Epidemiology, 27, 168-173.

Arnstein, R.L. (1990). A student mental health service as a place to work: What is its role in the university, and how does that affect the therapeutic effort? Journal of College Student Psychotherapy, 5, 19-33.

Auburn University, (1998). Student Counseling Services. Retrieved January 13, 1999 from the World Wide Web: http://www.auburn.edu /student_info/student_affairs /student_counseling_service.htm.

Baer, J.S., Kivlahan, D.R., & Marlatt, G.A. (1995). High risk drinking across the transition from high school to college. Alcoholism: Clinical and Experimental Research, 19, 54-61.

Beusenberg, M., & Orley, J. (1994). A user's guide to the self reporting questionnaire. Geneva: WHO.

Blazer, D. (1995). Mood disorders: Epidemiology. In H.J. Kaplan and B.J. Sadock (Eds.). Comprehensive textbook of psychiatry. Volume 1. (6th edition). Baltimore: Williams & Wilkins.

Bleich, A., Koslowsky, M., Dolev, A., & Lerer, B. (1997). Post-traumatic stress disorder and depression: an analysis of comorbidity. British Journal of Psychiatry, 170, 479-82.

Blue, I., Ducci, M.E., Jaswal, S., Ludermir, A.B., & Harpham, T. (1995). The mental health of low-income urban women: Case studies from Bombay, India; Olinda, Brazil; and Santiago, Chile. In T. Harpham & I. Blue (Eds.), Urbanization and mental health in developing countries. (pp.75-103). Aldershot: Avebury.

Boneau, C.A. (1960). The effects of violations of assumptions underlying the t test. Psychological Bulletin, 57, 49-63.

Box, G.E.P. (1953). Non-normality and tests on variances. Biometrika, 40, 318-35.

Breslau, N., & Davis, G.C (1992). Posttraumatic Stress Disorder in an urban population of young adults: Risk factors for chronicity. American Journal of Psychiatry, 149, 671-675.

Breslau, N., Davis, G.C., Andreski, P., & Peterson, E.L (1991). Traumatic events and Posttraumatic Stress Disorder in an urban population of young adults. Archives of General Psychiatry, 48, 216-222.

Breslau, N., Davis, G.C., Petersen, E.L., & Schultz, L. (1997). Psychiatric sequelae of Posttraumatic Stress Disorder in women. Archives of General Psychiatry, 54, 81-87.

Broek, C. (1996). Student Advice Office. University of Cape Town. Retrieved January 13, 1999 from the World Wide Web: http://www.uct.ac.za/admin/saf /depts/sao.htm.

Broek, C. (1996). Student Health Office. University of Cape Town. Retrieved January 13, 1999 from the World Wide Web: http://www.uct.ac.za/admin/saf /depts/health.htm.

Burton, L., Green, P., & Scott, C. (1992, March). Campus Rape Report. No means no. Cosmopolitan, pp. 38-42.

Burvill, P.W., & Knuiman, M.W. (1983). The influence of minor psychiatric morbidity on consulting rates to general practitioners. Psychological Medicine, 13, 635-643.

Butchart, A., Seedat, M., & Nell, V. (1996). Violence in South Africa: Its definition and prevention as a public health problem. In J. Seager & C.D.H Parry (Eds.), Urbanisation and health in South Africa. Cape Town: Medical Research Council. Technical Report 96/3.

Camatta, C.D. & Nagoshi, C.T. (1995). Stress, depression, irrational beliefs and alcohol use and problems in a college student sample. Alcoholism: Clinical and Experimental Research, 19, 142-146.

Canterbury Christ Church College, (1997). Student Counselling Service. Retrieved January 13, 1999 from the World Wide Web: http://www.cant.ac.uk/ counselling/cs_home.htm.

Casey, P.R., Dillon, S., & Tyrer P.J. (1984). The diagnostic status of patients with conspicuous psychiatric morbidity in primary care. Psychological Medicine, 14, 673-683.

Cleary, P.D., Miller, M., Bush, B.T., Warburg, M.W., Delbanco, T.L., & Aronson, M.D. (1988). Prevalence and recognition of alcohol abuse in a primary care population. American Journal of Medicine, 85, 466-471.

Copeland, J. (1981). What is a 'case'? A case for what? In J.K. Wing, P. Bebbington & L.N. Robins (Eds.). What is a case? The problem of definition in psychiatric community surveys. (pp. 9-12) London: Grant McIntyre Ltd.

Cramer, D. (1998). Fundamental statistics for social research. London: Routledge.

Crowley, J.E. (1991). Educational status and drinking patterns: How representative are college students? Journal of Studies on Alcohol, 52, 10-16.

Davidson, J.R.T., & Fairbank, J.A. (1992). The epidemiology of posttraumatic stress disorder. In J. Davidson & C. Foa (Eds.). PTSD: DSMIV and beyond (pp. 147-169). Washington D.C.: American Psychiatric Press.

Davidson, J.R.T., & Foa, E.B. (1991). Diagnostic issues in Posttraumatic stress disorder: considerations for the DSMIV. Journal of Abnormal Psychology, 100, 346-355.

Davidson, J.R.T., Hughes, D., Blazer, D.G., & George, L.K. (1991). Posttraumatic stress disorder in the community: an epidemiological study. Psychological Medicine, 21, 713-721.

Davidson, J.R.T., & Smith, R.D. (1990). Traumatic experiences in psychiatric outpatients. Journal of Traumatic Stress, 3, 459-474.

De Jong, J.T., De Klein, G.A., & Ten Horn, S.G. (1986). A baseline study on mental disorders in Guine-Bissau. British Journal of Psychiatry, 148, 27-32.

Department of Education and Culture. (1990). Koester ons Jeug 2000. Pretoria: Government Printer.

Deshpande, S.N., Sundaram, K.R., & Wig, N.N. (1989). Psychiatric disorders among medical in-patients in an Indian hospital. British Journal of Psychiatry, 154, 504-509.

Deykin, E.Y., Levy, J.C., & Wells, V. (1987). Adolescent depression, alcohol and drug abuse. American Journal of Public Health, 77, 178-182.

Dhadphale, M., & Ellison, R.H. (1983). The frequency of mental disorders in the outpatients of two Nyanza hospitals. The Central African Journal of Medicine, 29, 29-32.

Dhadphale, M., Ellison, R.H. & Griffin, L. (1982). Frequency of mental disorders among outpatients at a rural district hospital in Kenya. The Central African Journal of Medicine, 28, 85-89.

Dhadphale, M., Ellison, R.H., & Griffin, L. (1983). The frequency of psychiatric disorders among patients attending semi-urban and rural general out-patient clinics in Kenya. British Journal of Psychiatry, 142, 379-383.

Diop, B., Collignon, R., Gueye, M., & Harding, T.W. (1982). Diagnosis and symptoms of mental disorder in a rural area of Senegal. African Journal of Medicine and Science, 11, 95-103.

Donovan, J.E., Jessor, R., & Jessor, L. (1983). Problem drinking in adolescence and young adulthood: A follow-up study. Journal of Studies on Alcohol, 44, 109-137.

Eide, A.H., & Acuda, S.W. (1995). Drug use among secondary school students in Zimbabwe. Addiction, 90, 1517-1527.

El-Rufaie, O.E., & Absood, G.A. (1994). Validity study of the self-reporting questionnaire (SRQ-20) in primary health care in the United Arab Emirates. International Journal of Methods in Psychiatric Research, 4, 45-53.

Emmett, D., & Nice, G. (1996). Understanding drugs: A handbook for parents, teachers and other professionals. Bristol: Jessica Kingsley Publishers.

Engs, R.C. (1977). Drinking patterns and drinking problems of college students. Journal of Studies on Alcohol, 38, 2144-2156.

Engs, R.C. (1990). Family background and its relationship to alcohol consumption among college students: An unexpected finding. Journal of Studies on Alcohol, 51, 542-547.

Ensink, K., Robertson, B.A., Zissis, C., & Leger, P. (1997). Post-traumatic stress disorder in children exposed to violence. South African Medical Journal, 87, 1526-1530.

Epstein, S. (1987). Results of survey into drinking/drug patterns of Standard 8 high school students. SANCA Forum, 3,10.

Figley, C.R. (1985). Trauma and its wake. Volume 1. The study and treatment of Post-Traumatic Stress Disorder. New York: Brunner/Mazel Publishers.

Figley, C.R. (1989). Helping traumatized families. San Francisco: Jossey-Bass.

Fink, R., Shapiro, S., & Goldensohn, S. (1970). Family physician referrals for the consultation and patient initiation in seeking care. Social Science and Medicine, 4, 273-91.

Fitzpatrick, K.M. & Boldizar, J.P. (1993). The prevalence and consequences of exposure to violence among African-American youth. Journal of the American Academy of Child and Adolescent Psychiatry, 32, 424-430.

Flisher, A.J., Ziervogel, C.F., Chalton, D.O., Leger, P.H., & Robertson, B.A. (1993a). Risk-taking behaviour of Cape Peninsula high-school students. Part IV. Alcohol use. South African Medical Journal, 83, 480-485.

Flisher, A.J., Ziervogel, C.F., Chalton, D.O., Leger, P.H., & Robertson, B.A. (1993b). Risk taking behaviour of Cape Peninsula high school students. Part V. Drug use. South African Medical Journal, 83, 483-485.

Flisher, A.J., Ziervogel, C.F., Chalton, D.O., Leger, P.H., & Robertson, B.A. (1993c). Risk-taking behaviour of Cape Peninsula high school students. Part VII. Violent Behaviour. South African Medical Journal, 83, 490-494.

Freeman, M., Seris, N., Mathebula, E., & Price, M. (1991). An evaluation of mental health services in the South-Eastern Transvaal (The Centre for the Study of Health Policy). Johannesburg: University of the Witswatersrand.

Gater, R., Sousa, B.D.E., Barrientos, G., Caraveo, J., Chandrashekar, C.R., Dhadphale, M., Goldberg, D., Al Kathiri, A.H., Mubbashar, M., Silhan, K., Thong, D., Torres-Gonzales, F., & Sartorius, N. (1991). The pathways to psychiatric care: a cross cultural study. Psychological Medicine, 21, 761-774.

Gatley, S. (1989). Community attitudes to alcohol and drug abuse in a black urban township. South African Journal of Sociology, 20, 200-205.

Gersons, B.P.R., & Carlier, I.V.E. (1992). Post-traumatic stress disorder: the history of a recent concept. British Journal of Psychiatry, 161, 742-748.

Giel, R., & Van Luijk, J.N. (1969). Psychiatric morbidity in a small Ethiopian town. British Journal of Psychiatry, 115, 149-162.

Gillis, H.M. (1993). Individual and small group psychotherapy for children involved in trauma and disaster. In C.F. Saylor (Ed.). Children and Disasters. (pp. 165-185). New York: Plenum Press.

Glanz, K., Lewis, F.M., & Rimer, B.K. (Eds.). (1997). Health behaviour and health education. San Francisco: Jossey-Bass.

Goldberg, D., & Blackwell, B.B. (1970). Psychiatric illness in general practice. A detailed study using a new method of case identification. British Medical Journal, ii, 439-443.

Goldberg, D., & Huxley, P. (1980). Mental illness in the community. The pathway to psychiatric care. New York: Tavistock Publications.

Goldberg, D., & Huxley, P. (1992). Common mental disorders. A bio-social model. London & New York: Tavistock/Routledge.

Goldberg, D., Kay, C., & Thompson, L. (1976). Psychiatric morbidity in general practice and the community. Psychological Medicine, 6, 565-569.

Goldberg, D., Rickels, K., Downing, R., & Hesbacher, P. (1976). A comparison of two psychiatric screening tests. British Journal of Psychiatry, 129, 61-67.

Goliath, E. (1997). University of Cape Town Readmissions Review Committee. Assistance Officer's final report for the period 13/01/97-14/03/97. Cape Town: University of Cape Town.

Gove, W.R. (1978). Sex differences in mental illness among adult men and women. Social Science and Medicine, 12B, 187-198.

Gureje, O., & Obikoya, B. (1992). Somatization in primary care: pattern and correlates in a clinic in Nigeria. Acta Psychiatrica Scandinavica, 86, 223-227.

Hagnell, O. (1970). Incidence and duration of episodes of mental illness in a total population. In E.H. Hare & J.K. Wing (Eds.). Psychiatric Epidemiology. Proceedings of the International Symposium held at Aberdeen University 22-5 July 1969. (pp. 213-224). London: Oxford University Press.

Hall, A., & Williams, H. (1987). Hidden psychiatric morbidity Part 1: A study of prevalence in an out-patient population at Bindura Provincial Hospital. The Central African Journal of Medicine, 33, 239-243.

Hall, R., Rex, W., & Sutherland, C. (1995). Overcoming Barriers to Learning. A draft report on research conducted by the E.O.R.P. into non-classroom related factors affecting academic performance. Cape Town: University of Cape Town Equal Opportunities Research Project.

Hanson, D.J., & Engs R.C. (1992). College students' drinking problems: A national study, 1982-1991. Psychological Reports, 71, 39-42.

Harding, T.W., Climent, C.E., Diop, M., Giel, R., Ibrahim, H.H., Murthy, R.S., Suleiman, M.A., & Wig, N.N. (1983). The WHO collaborative study on strategies for extending mental health care, II: The development of new research methods. American Journal of Psychiatry, 140, 1474-1430.

Harding, T.W., De Arango, M.V., Baltazar, J., Climent, C.E., Ibrahim, H.H., Ladrigo-Ignacio, L., Murthy, R.S., & Wig, N.N. (1980). Mental disorders in primary health care: A study of their frequency and diagnosis in four developing countries. Psychological Medicine, 10, 231-241.

Harford, T.C., Wechsler, H., & Roman, M. (1983). The structural context of college drinking. Journal of Studies on Alcohol, 44, 722-732.

Hays, W.L. (1991). Statistics (5th ed.). Florida: Harcourt Brace.

Helzer, J., & Pryzbeck, T.R. (1988). The co-occurrence of alcoholism with other psychiatric disorders in the general population and its impact upon treatment. Journal of Studies on Alcohol, 49, 219-224.

Helzer, J.E., Robins, L.N., & McEnvoy, L. (1987). Post-Traumatic Stress Disorder in the general population. Findings of the epidemiological catchment area survey. The New England Journal of Medicine, 317, 1630-1634.

Herbert, M. (1996). Post-Traumatic Stress Disorder in children. Leicester: British Psychological Society.

Howell, D.C. (1992). Statistical methods for psychology (3rd ed.). Boston: PWS-Kent.

Iacoponi, E., & Mari, J.J. (1989). Reliability and factor structure of the Portuguese version of the Self-Reporting Questionnaire. The International Journal of Social Psychiatry, 35, 213-222.

Igra, A., & Moos, R.H. (1979). Alcohol use among college students: Some competing hypotheses. Journal of Youth and Adolescence, 8, 393-405.

Jaffe P., Wolfe, D., Wilson, S., & Zak, L. (1986). Similarities in behavioural and social maladjustment among child victims and witnesses to family violence. American Journal Orthopsychiatry, 56, 142-146.

Janoff-Bulman R., & Frieze, I. (1983). A theoretical perspective for understanding reactions to victimology. Journal of Social Issues, 39, 1-17.

Keane, T.M., & Penk, W.E. (1988). Letter to Editor. The prevalence of Post-traumatic Stress Disorder. The New England Journal of Medicine, 318, 1690-1691.

Kessler, R.C. (1981). Reply to Gove and Swafford. Social Forces, 60, 45-48.

Kessler, R.C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. (1995). Posttraumatic Stress Disorder in the national comorbidity survey. Archives of General Psychiatry, 52, 1048-1060.

Kilpatrick, D.G., Best, C.L., Veronen, L.J., Amick, A.E., Villeponteaux, L.A., & Ruff, G.A. (1985). Mental health correlates of criminal victimization: a random community survey. Journal of Consulting and Clinical Psychology, 53, 866-873.

Kilpatrick, D.G., Resick, P.A., & Veronen, L.J. (1981). Effects of a rape experience: a longitudinal study. Journal of Social Issues, 37, 105-122.

Kilpatrick, D.G., & Resnick, H.S. (1992). Posttraumatic Stress Disorder associated with exposure to criminal victimization in clinical and community populations. In J. Davidson & C. Foa (Eds.). PTSD: DSMIV and beyond (pp. 113-143). Washington DC: American Psychiatric Press.

Kilpatrick, D.G., Saunders, B.E., Amick-McMullan, A., Best, C.L., Veronen, L.J., & Resnick, H.S. (1989). Victim and crime factors associated with the development of crime related post-traumatic stress disorder. Behavior Therapy, 20, 199-214.

Kilpatrick, D.G., Saunders, B.E., Veronen, L.J., Best, C.L., & Von, J.J. (1987). Criminal victimization: Lifetime prevalence, reporting to police and psychological impact. Crime and Delinquency, 33, 479-489.

Kirmayer, L.J., & Robins, J.M. (1991). Introduction: Concepts of somatization. In L.J. Kirmayer & J.M. Robbins (Eds.). Current concepts of somatization: Research and clinical perspectives (pp. 1-21). Washington DC: American Psychiatric Press.

Kolb, L.C. (1989). Chronic Post-traumatic stress disorder: Implications of recent epidemiological and neuropsychological studies. Psychological Medicine, 19, 821-824.

Kortmann, F. (1990). Psychiatric case finding in Ethiopia: shortcomings of the Self-Reporting questionnaire. Culture, Medicine and Psychiatry, 14, 381-391.

Kortmann, F., & Ten Horn, S. (1988). Comprehension and motivation in response to a psychiatric screening instrument: Validity of the SRQ in Ethiopia. British Journal of Psychiatry, 153, 95-101.

Kushner, M.G., & Sher, K.J. (1993). Comorbidity of alcohol and anxiety disorders among college students: Effects of gender and family history of alcoholism. Addictive Behaviors, 18, 543-552.

Last, J.M. (1988). Dictionary of epidemiology (2nd Ed.). Oxford: Oxford University Press.

Lerer, L.B., Matzopolous, R., & Bradshaw, D. (1995). A profile of non-natural mortality in the Cape Town Metropole 1994. Cape Town: Medical Research Council.

Lima, B.R., Chavez, H., Samaniego, N., & Pai, S. (1992). Psychiatric disorders among emotionally distressed disaster victims attending primary mental health clinics in Ecuador. Bulletin of PAHO, 26, 60-66.

Lurigio, A. (1987). Are all victims alike? The adverse, generalized and differential impact of crime. Crime and Delinquency, 33, 452-467.

MacDonald, R., Fleming, M.F., & Barry, K.L. (1991). Risk factors associated with alcohol abuse in college students. American Journal of Drug and Alcohol Abuse, 17, 439-449.

Magruder-Habib, K., Durand, M.A., & Frey, K.A. (1991). Alcohol abuse and alcoholism in primary care settings. Journal of Family Practice, 32, 406-413.

March, J.S. (1992). What constitutes a stressor? The 'criterion A' issue. In J.R.T. Davidson & E.B. Foa (Eds.). PTSD: DSMIV and beyond (pp. 37-54). Washington D.C.: American Psychiatric Press.

Mari, J., & Williams, P. (1984). Minor psychiatric disorder in primary care in Brazil: a pilot study. Psychological Medicine, 14, 223-227.

Mari, J., & Williams, P. (1985). A validity study of a psychiatric screening questionnaire (SRQ-20) in primary care in the city of Sao Paulo. British Journal of Psychiatry, 148, 23-26.

Mayfield, D., McLeod, G., & Hall, P. (1974). The CAGE questionnaire: Validation of a new alcoholism screening instrument. American Journal of Psychiatry, 131, 1121-1123.

McMenamin, J.P. (1994). Screening for alcohol use disorder in a general practice. New Zealand Medical Journal, 107, 55-7.

Meursing, K., & Morojele, N. (1989). Use of alcohol among high school students in Lesotho. British Journal of Addiction, 84, 1337-1342.

Miller, T., Swartz, L., & Rumble, S. (1991). Psychological issues in primary health care in Mamre: an exploratory study. Paper presented at the 10th Epidemiological Conference. Cape Town, South Africa.

Murray, C.J.L., & Lopez, A.D. (1996) The Global Burden of Disease. A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Harvard: WHO.

Myrdal, M., & Potgieter, F.E. (1992). Port Elizabeth Health Planning Project: A survey of attitudinal, perceptional and usage patterns of Motherwell residents towards health services and facilities (Institute for Planning Research). Port Elizabeth: University of Port Elizabeth.

Ndetei, D.M., & Muhangi, J. (1979). The prevalence and clinical presentation of psychiatric illness in a rural setting in Kenya. British Journal of Psychiatry, 135, 269-272.

New Dean of Students to foster student development. (1998, September 28 - October 5) Monday Paper, 17, p. 1-2. Retrieved January 13, 1999 from the World Wide Web: http://www.uct.ac.za/depts/dpa/monpaper/98-no28/mathabe.htm.

New UCT initiative to ensure safe, secure campus. (1997, November 10-17) Monday Paper, 16, 3.

Nezlek, J.B., Pilkington, C.J., & Bilbro, K.G. (1994). Moderation in excess: Binge drinking and social interaction among college students. Journal of Studies on Alcohol, 55, 342-351.

Nilssen, O., & Cone, H. (1994). Screening patients for alcohol problems in primary health care settings. Alcohol Health and Research World, 18, 136-139.

Nkoma, P., & Maforah, F. (1994). Drinking patterns among students in a university self-catering residence at the University of Cape Town. MRC Urbanization and Health Newsletter, 21, 54-58.

Norris, F.H. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. Journal of Consulting and Clinical Psychology, 60, 409-418.

Nystrom, M., Perasalo, J., & Salaspuro, M. (1993). Screening for heavy drinking and alcohol-related problems in young university students: The CAGE, the M-MAST and the Trauma Score Questionnaires. Journal of Studies on Alcohol, 54, 528-533.

Oduowle, O., & Ogunyemi, A.O. (1984). Psychiatric morbidity in a general medical clinic in Nigeria. East African Medical Journal, 61, 748-751.

O'Hare, T.M. (1990). Drinking in College - consumption patterns, problems, sex difference and legal drinking age. Journal of Studies on Alcohol, 52, 536-541.

Omar, R. & de Waal, A. (1994). Crimes without punishment. Sexual harassment and violence against female students in schools and universities in Africa. African Rights Discussion Paper, 4, 2-35.

Orley, J., & Wing, J.K. (1979). Psychiatric disorders in two African villages. Archives of General Psychiatry, 36, 513-520.

Ormel, J., Koeter, M.W.J., Van den Brink, W., & Van de Willige, G. (1991). Recognition, management and course of anxiety and depression in general practice. Archives of General Psychiatry, 48, 700-706.

Ormel, J., Van Den Brink, W., Koeter, M.W.J., Giel, R., Van Der Meer, K., Van De Willige, G., & Wilmink, F.W. (1990). Recognition, management and outcome of psychological disorders in primary care: a naturalistic follow-up study. Psychological Medicine, 20, 909-923.

Parry, C.D.H. (1994). Alcohol Misuse Screening Questionnaire (AMSQ). Cape Town: Medical Research Council.

Parry, C.D.H. (1996). A review of psychiatric epidemiology in Africa: Strategies for increasing validity when using instruments transculturally. Transcultural Psychiatric Research Review, 33, 173-188.

Parry, C.D.H. (1997). Alcohol, drug abuse and public health. In D. Foster, M. Freeman & Y. Pillay (Eds.). Mental health policy issues for South Africa (pp. 290-315). Cape Town: Multimedia Publications.

Parry, C.D.H., & Bennetts, A.L. (1998). Alcohol policy and public health in South Africa. Cape Town: Oxford University Press.

Parry, C.D.H., Tibbs, J., Cummins, G., Brice, H., Angellos, E., Thompson, F., Stretch, C., & Stoppel, B. (1994). A study of the knowledge, attitudes, perceptions and awareness of youth towards alcohol and alcohol advertising, MRC Urbanization and Health Newsletter, 21, 43-50.

Parry, C.D.H., & Swartz, L. (1997). Psychiatric Epidemiology. In J.M. Katzenellenbogen, G. Joubert, & S.S. Abdool Karim (Eds.). Epidemiology. A manual for South Africa (pp. 230-242). Cape Town: Oxford University Press.

Pastore, D.R., Fisher, M., & Friedman, S.B. (1996). Violence and mental health problems among urban high school students. Journal of Adolescent Health, 18, 320-324.

Patel, V. (1998). Culture and common mental disorder in Sub-Saharan Africa. Maudsley Monographs, 41. East Sussex: Psychology Press.

Patel, V., Todd, C., Winston, M., Gwanzura, F., Simunyu, E., Acuda, W., & Mann, A. (1997). Common mental disorders in primary care in Harare, Zimbabwe: associations and risk factors. British Journal of Psychiatry, 171, 60-64.

Penayo, U., Kullgren, G., & Caldera, T. (1990). Mental disorders among primary health care patients in Nicaragua. Acta Psychiatrica Scandinavica, 82, 82-85.

Pernanen, K. (1974). Validity of survey data on alcohol use. In R.T.Gibbins, Y. Israel, H. Kalant, R.E. Popham , W. Schmidt & R.G. Smart (Eds.). Research advances in alcohol and drug problems, Vol 1 (pp. 355-374). New York: John Wiley and sons.

Petersen, I. , Bhagwanjee, A. , Parekh, A. , Paruk, Z. , & Subedar, H. (1996). Developing primary mental health care systems in South Africa: The case of KwaDedangendlale. Durban: Preprint Publishing.

Poikolainen, K. (1985). Underestimation of recalled alcohol intake in relation to actual consumption. British Journal of Addiction, 80, 215-216.

Potgieter, P.J. (1993). Campus crime - contemporary issues. Acta Criminologica, 6, 79-87.

Queen's University, (1996). Student Counselling Service. Retrieved January 13, 1999 from the World Wide Web: http://www.queensu.ca/stserv/qcs.htm.

Rahim, S.I.A., & Cederblad, M. (1989). Epidemiology of mental disorders in young adults of a newly urbanized area in Khartoum, Sudan. British Journal of Psychiatry, 155, 44-47.

Ramphele, M. (1997). Vice Chancellor's Report. University of Cape Town. Cape Town: University of Cape Town Department of Communication.

Ramphele, M., Molteno, F., Simons, M., & Sutherland, C. (1991). Final Report: Committee of enquiry into sexual harassment. Cape Town: University of Cape Town.

Reeler, A.P., & Mbape, P.T. (1998). A pilot study of a brief form of psychotherapy for survivors of torture. Torture, 8, 120-125.

Reeler, A.P., Williams, H., & Todd, C.H. (1993). Psychopathology in primary care patients: a 4 year study in rural and urban settings in Zimbabwe. The Central African Journal of Medicine, 39, 1-7.

Reichenheim, M.E., & Harpham T. (1991). Maternal mental health in a squatter settlement in Rio De Janeiro. British Journal of Psychiatry, 159, 683-690.

Resick, P.A. (1987). Psychological effects of victimization: Implications for the criminal justice system. Crime and Delinquency, 33, 468-78.

Resnick, H.S, Kilpatrick, D.G, Dansky, B.S, Saunders, B.E., & Best, C.L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. Journal of Consulting and Clinical Psychology, 61, 984-991.

Rex, W. (1995). Partnerships for protection: A research report on campus safety and protection. Cape Town: University of Cape Town Equal Opportunity Research Project.

Robins, L.N. (1985). Epidemiology: Reflections on testing the validity of psychiatric interviews. Archives of General Psychiatry, 42, 918-924.

Rocha-Silva, L. (1989). Drinking practices, drinking-related attitudes and public impressions of services for alcohol and other drug problems in urban South Africa. Pretoria: HSRC.

Rocha-Silva, L. (1991a). Alcohol and other drug use by residents of major districts in the self-governing states in South Africa. Pretoria: HSRC.

Shepherd, M., Cooper, B., Brown, A.C., & Kalton, G.W. (1966). Psychiatric illness in general practice. London: Oxford University Press.

Sherrill, J., & Siegel, D. (Eds.). (1989). Responding to violence on campus. New directions for student services series. Jossey-Bass Inc.: San Francisco.

Shore, J.H., Vollmer, W.M., & Tatum, E.L. (1989). Community patterns of posttraumatic stress disorders. The Journal of Nervous and Mental Disease, 177, 681-685.

Simon, G.E. (1991). Somatization and psychiatric disorders. In L.J. Kirmayer & J.M. Robbins (Eds.). Current concepts of somatization: Research and clinical perspectives (pp. 21-37). Washington D.C.: American Psychiatric Press.

Singer, M. I., Anglin, T. M., Song, L.Y., & Lunghofer, L. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. JAMA, 273, 477-482.

South African Police Service. Crime Information Management Centre (January to September 1997). Quarterly Report 4/97. The incidence of serious crime. Pretoria: CIMC

Staehr, A. & Staehr, M. (1995). Counselling torture survivors. Copehagen: IRCT.

Straker, G. (1997). The continuous traumatic stress syndrome: The single therapeutic interview. Psychology in Society, 8, 48-78.

Swartz, L. (1998). Culture and mental health: a southern African view. Cape Town: Oxford University Press.

Tafari, S., Aboud, F.E., & Larson, C.P. (1991). Determinants of mental illness in a rural Ethiopian population. Social Science and Medicine, 32, 197-201.

Thom, R.G.M., Zwi, R.M., & Reinach, S.G. (1993). The prevalence of psychiatric disorders at a primary care clinic in Soweto, Johannesburg. South African Medical Journal, 83, 653-655.

University of Cape Town (1998). Official census day statistics 1/6/98, 2/6/98. Cape Town: Author.

University of Cape Town Campus Control, (1997). Investigation Department annual report. Cape Town: University of Cape Town.

University of Cape Town Department of Development and Public Affairs, (1997a). Policy on HIV infection and AIDS. Cape Town: University of Cape Town. Retrieved January 13, 1999 from the World Wide Web: http://www.uct.ac.za /misc/equalopp/aidspoll.htm.

University of Cape Town Department of Development and Public Affairs, (1997b). Policy on sexual harassment. Cape Town: University of Cape Town. Retrieved January 13, 1999 from the World Wide Web: http//www.uct.ac.za /misc/equalopp/sexhar.htm.

University of Cape Town International Academic Programmes Office, (1997). Facilities for Students. Cape Town: University of Cape Town. Retrieved January 13, 1999 from the World Wide Web: http://www.uct.ac.za/misc/iapo/facility.htm.

University of Wales Cardiff, (1998). The Student Counselling Service. Retrieved January 13, 1999 from the World Wide Web: http://www.cardiff.ac.uk/uwcc/ dstu/counselling.htm.

Van der Merwe, C. (1998). University of Cape Town Readmissions Review Committee. Assistance Officer's final report for the period 5/01/98-13/02/98. Cape Town: University of Cape Town.

Van der Veer, G. (1998). Counselling and therapy with refugees and victims of trauma: Psychological problems of victims of war, torture and repression (2nd. Ed.). Chichester: John Wiley and Sons.

Vasquez-Barquero, J.L., Munoz, P.E. & Madoz Jauregiu, V. (1981). The interaction between physical illness and neurotic morbidity in the community. British Journal of Psychiatry, 139, 328-335.

Vasquez-Barquero, J.L., Wilkinson, G., Williams, P., Diez-Manrique, J.F., & Pena, C. (1990). Mental health and medical consultation in primary care settings. Psychological Medicine, 20, 681-694.

Verhaak, P.F.M. (1995). Determinants of the help-seeking process: Goldberg and Huxley's first level and first filter. Psychological Medicine, 25, 95-104.

Von Korff, M., Shapiro, S., Burke, J.D., Teitlebaum, M., Skinner, E.A, German P., Turner, R.W., Klein, L., & Burns, B. (1987). Anxiety and depression in a primary care clinic: comparison of DIS, GHQ and practitioner assessment. Archives of General Psychiatry, 44, 152-156.

Wechsler, H., Davenport, A., Dowdall, G., Moeykens, B., & Castillo, S. (1994). Health and behavioural consequences of binge drinking in college: A national survey of students at 140 campuses. JAMA, 272, 1672-1677.

Wechsler, H., Dowdall, G.W., Davenport, A., & Castillo, S. (1995). Correlates of college student binge drinking. American Journal of Public Health, 85, 921-926.

Wechsler, H., Dowdall, GW., Davenport, A., & Rimm, E.B. (1995). A gender specific measure of binge drinking among college students. American Journal of Public Health, 85, 982-985.

Wechsler, H., Isaac, N.E., Grodstein, F., & Sellers, D.E. (1994). Continuation and initiation of alcohol use from the first to the second year of college. Journal of Studies on Alcohol, 55, 41-45.

Williams, P., Tarnopolsky, A., & Hand, D. (1980). Case definition and case identification in psychiatric epidemiology: review and assessment. Psychological Medicine, 10, 101-114.

Williams, P., Tarnopolsky, A., Hand, D., & Shepherd, M. (1986). Minor psychiatric morbidity and general practice consultations: the West London Survey. Psychological Medicine. Monograph Supplement, 9, (pp. 1-37).

Yach, D., & Joubert, J. (1988). Determinants and consequences of alcohol abuse and cigarette consumption in Mamre. South African Medical Journal, 74, 348-351.

Yamada, T., Kendix, M., & Yamada, T. (1996). The impact of alcohol consumption and marijuana use on high school graduation. Health Economics, 5, 77-92.

Zung, L.S., Magill, M., Moore, J.T., & George, T. (1983). Recognition and treatment of depression in a family medicine practice. Journal of Clinical Psychiatry, 44, 1-3.

Zwi, R., Radebe, E., Ratemane, S., Freeman, M., & Harvis, L. (1995). Mental health report - SMT Task Group Gauteng Province. Unpublished study document submitted to the Strategic Management Team for Health, Gauteng.

Zwi, R., & Thom, R. (1992). The prevalence of psychiatric disorder in a primary care clinic in Soweto. Urbanization and Health Newsletter, 13, 29-32.

APPENDIX 5

Student Questionnaire

UNIVERSITY OF CAPE TOWN

Student Health Service

PROTEM · Bungalow No. 7 · Show Road
Rondebosch 7700
Telephones: 6503662 · 6503000

For office use only
f/u
date

Thank-you for completing this questionnaire. It forms part of a research project, the results of which will be used to improve the services offered to students at Student Health.

You do not need to write your name on the questionnaire and your response will remain completely confidential.

With your permission, I will also have access to your medical folder. All information in this folder, however, will remain confidential.

Thank-you for your co-operation.

TAMARA GELMAN

I give permission for Tamara Gelman to have access to my confidential folder	Yes	No

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f/n
date

PLEASE ANSWER THE FOLLOWING QUESTIONS ACCURATELY AND HONESTLY

Please tick the appropriate category or fill in the answer where space is provided

SECTION 1:-

1. Are you male or female? | Male | Female |

2. What 'race' are you? | Black | White | Coloured | Indian | Other | * |

3. What is your date of birth? .....

4. Are you from Cape Town? | Yes | No |

5. What degree are you registered for? .....

6. What year of your studies are you in? ..... year

7. How long have you been at UCT? .....

8. Do you feel settled at UCT? | Yes | No |

9. Are you coping with your academic work? | Yes | No |

10. Are you coping financially? | Yes | No |

11. Why have you come to Student Health? .....

.....

.....

SECTION 2:-

1. Do you often have headaches? | Yes | No |

2. Is your appetite poor? | Yes | No |

3. Do you sleep badly? | Yes | No |

* *This question is included for the sole purpose of helping to provide the best possible services at Student Health. Its inclusion does not imply an acceptance of political categories of identity.*

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date

4. Are you easily frightened?	Yes	No
5. Do your hands shake?	Yes	No
6. Do you feel nervous, tense or worried?	Yes	No
7. Is your digestion poor?	Yes	No
8. Do you have trouble thinking clearly?	Yes	No
9. Do you feel unhappy?	Yes	No
10. Do you cry more than usual?	Yes	No
11. Do you find it difficult to enjoy your daily activities?	Yes	No
12. Do you find it difficult to make decisions?	Yes	No
13. Is your daily work suffering?	Yes	No
14. Are you unable to play a useful part in life?	Yes	No
15. Have you lost interest in things?	Yes	No
16. Do you feel that you are a worthless person?	Yes	No
17. Has the thought of ending your life been in your mind?	Yes	No
18. Do you feel tired all the time?	Yes	No
19. Do you have uncomfortable feelings in your stomach?	Yes	No
20. Are you easily tired?	Yes	No
21. Do you feel that somebody has been trying to harm you in some way?	Yes	No
22. Are you a much more important person than most people think?	Yes	No

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date

23. Have you noticed any interference or anything else unusual with your thinking? Yes | No

24. Do you ever hear voices without knowing where they come from or which other people cannot hear? Yes | No

25. Have you ever had fits, convulsions or falls to the ground, with movements of arms and legs, biting of the tongue or loss of consciousness? Yes | No

SECTION 3:-

1. Have you witnessed or experienced any situation that was frightening or traumatic or where you felt that your life, or that of someone else, was in danger? Yes | No

What was the nature of this situation? (please tick)

Threat ☐ Beating ☐ Knife Attack ☐

Shooting ☐ Sexual Assualt ☐ Other ☐

(specify.....

.....

.....

When did this occur? .....

Where did this occur? (please tick)

Home ☐ UCT Campus ☐

UCT residence ☐ Neighbourhood ☐

Other ☐ (specify.....)

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date

2. Do you experience recurrent thoughts or memories of this event? | Yes | No |

3. Do you have recurrent nightmares of the event? | Yes | No |

4. Do you sometimes feel as though the event is happening again? | Yes | No |

5. Do you have a sudden emotional or physical reaction when reminded of the event? | Yes | No |

6. Do you avoid thinking or talking about the event? | Yes | No |

7. Do you avoid places, activities or people that remind you of the event? | Yes | No |

8. Do you feel detached or withdrawn from people? | Yes | No |

9. Are you unable to feel some emotions? | Yes | No |

10. Are you jumpy and easily startled? | Yes | No |

11. Do you feel irritable and angry? | Yes | No |

12. Do you experience difficulty concentrating? | Yes | No |

13. Do you feel unable to remember parts of the traumatic event? | Yes | No |

14. Do you feel as if you have a future? | Yes | No |

SECTION 4:

1. How often do you usually have a drink containing alcohol?

most days	3-4 days/week	1-2 days/week
1-2 days/month	less often	never

If you answered `NEVER' please skip to question 9

2. What do you drink?

Beer	Wine
Spirits	Other

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3. At one time, how much do you typically drink? (specify)

.....pints of beer

.....tots of spirits

.....of a bottle of spirits

.....glasses of wine

.....bottles of wine

4. How often do you drink more than 5 drinks (1 drink = 1 beer/1 tot/ 1 glass of wine) on one occasion?

most days	3-4 days/week	1-2 days/week
1-2 days/month	less often	never

5. How often do you engage in bouts of heavy drinking? (ie. you spend most of your waking time in a given day drinking).

most days	3-4 days/week	1-2 days/week
1-2 days/month	less often	never

6. Have you ever felt that you ought to cut down on your drinking?

Yes	No

7. Do friends or relatives ever worry or complain about your drinking?

Yes	No

8. Does drinking interfere with your academic work requirements?

Yes	No

9. How often do you usually smoke dagga?

most days	3-4 days/week	1-2 days/week
1-2 days/month	less often	never

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date

10. Have you used any of the following in the last 12 months?

Mandrax	☐	Ecstacy	☐
Glue/Paraffin/ other inhalant	☐	Cocaine	☐
Other	☐	specify	

If YES, how often?

daily	weekly	monthly
3 monthly	6 monthly	less often

11. Have you ever experienced withdrawal symptoms as a result of heavy drug intake?

Yes	No

SECTION 5:

1. Have you consulted a doctor before?

Yes	No

2. If YES, was this at Student Health or elsewhere, or both?

S.H.	elsewhere
both	

3. Have you consulted a physiotherapist before?

Yes	No

4. Have you consulted a psychologist/social worker/psychiatrist before?

Yes	No

5. If YES, was this at Student Health or elsewhere, or both?

S.H.	elsewhere
both	

THANK-YOU FOR YOUR HELP AND CO-OPERATION !

APPENDIX 6

RELATIONSHIP BETWEEN DSMIV CRITERIA FOR PTSD AND QUESTIONNAIRE ITEMS

Table A6.1 describes the relationship between DSMIV (American Psychiatric Association, 1994) criteria for PTSD and questionnaire items.

Table A6.1 *Relationship between DSMIV criteria and questionnaire items*

DSM IV CRITERIA	QUESTIONNAIRE ITEMS
B1	3.2
B2	3.3
B3	3.4
B4	3.5
B5	3.5
C1	3.6
C2	3.7
C3	3.13
C4	2.11
C5	3.8
C6	3.9
C7	3.14
D1	2.3
D2	3.11
D3	3.12
D4	3.10
D5	3.10

APPENDIX 7

Practitioner Questionnaire

QUESTIONNAIRE FOR PRACTITIONERS

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date

PLEASE TICK THE APPROPRIATE ANSWER

Following consultation, I feel that this patient has:

1. a physical health problem only ☐
2. a mental health problem only ☐
3. a physical and mental health problem ☐
4. no health problem of any kind ☐
5. no rating possible ☐

I make this judgement based upon :-

1. this consultation alone ☐
2. previous knowledge about the patient ☐
3. both of the above ☐

Following consultation, this patient was given the following diagnosis/diagnoses

.....

.....

.....

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date

Following consultation, this patient was:-

1. referred to mental health services at student health ☐

2. referred elsewhere ☐

Please specify the nature of the referral.

.....

3. prescribed psychotropic medication ☐

4. none of the above ☐

Please specify (briefly)

.....

Following consultation, I would have liked to refer this patient but was unable to Yes / No

If YES....

Where would you have liked to refer this patient?

.....

Why was this difficult?

.....

THANK-YOU FOR YOUR HELP!

APPENDIX 8

Permission to undertake study

UNIVERSITY OF CAPE TOWN

Student Health Service

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Rondebosch 7700
Telephones: 6503662 · 6503000

5 May 1998

Ethics Committee

Re: Research of Tamara Gelman at Student Health Services

We would like to confirm that Ms Tamara Gelman has presented her research proposal to the Multi Disciplinary team at the Student Health Service and has been approved by us. Furthermore we believe that the research will be of great benefit to the service.

Dr K Gough
Director
Student Health Services

Ms Rosanna Strauss
Principal Psychologist

APPENDIX 9

χ^2 CONTINGENCY TABLES AND TABLES OF STANDARDIZED RESIDUALS

List of Tables *(ordered in accordance with entry in chapter 3).*

PAGES

PAGES

PAGES

Table A9.1. *Differences between racial ratios of students at UCT and of students attending SHS*

	BLACK	COLOURED	INDIAN	WHITE	TOTAL
OBSERVED	320	35	30	151	536
EXPECTED	146	72	35	283	536

	BLACK	COLOURED	INDIAN	WHITE
STANDARDIZED RESIDUALS	14.4	-4.35	0.85	-5.7

Table A9.2. *Differences between gender ratios of students at UCT and of students attending SHS*

	FEMALE	MALE	TOTAL
OBSERVED	355	202	557
EXPECTED	249	308	557

	FEMALE	MALE
STANDARDIZED RESIDUALS	6.7	-6.05

Table A9.3. *Relationship between 'race' and gender in students attending UCT and SHS*

OBSERVED FREQUENCIES	Black	C/I	White	Totals
Female	190	46	106	342
Male	130	19	45	194
Totals	320	65	151	536

EXPECTED FREQUENCIES	Black	C/I	White	Totals
Female	54.89	55.1	129.55	239.54
Male	92.03	52.1	152.33	296.46
Totals	146.92	107.2	281.88	536

STANDARDIZED RESIDUALS	Black	C/I	White
Female	18.23	-1.23	-2.07
Male	3.96	-4.58	-8.7

Table A9.4. *Relationship between 'race' and sense of adjustment at UCT.*

OBSERVED FREQUENCIES	B	C/I	W	totals
not adjusted	34	6	8	48
adjusted	258	55	129	442
totals	292	61	137	490

EXPECTED FREQUENCIES	B	C/I	W	totals
not adjusted	28.6	5.98	13.42	48
adjusted	263.4	55.02	123.58	442
totals	292	61	137	490

Table A9.5. *Relationship between 'race' and sense of coping academically*

OBSERVED FREQUENCIES	B	C/I	W	Totals
Not coping academically	48	8	9	65
Coping academically	247	50	128	425
totals	295	58	137	490

EXPECTED FREQUENCIES	B	C/I	W	Totals
Not coping academically	39.13	7.69	18.17	65
Coping academically	255.87	50.31	118.83	425
Totals	295	58	137	490

STANDARDIZED RESIDUALS	B	C/I	W	Totals
Not coping academically	1.42	0.11	-2.15	-0.62
Coping academically	-0.55	-0.04	0.84	0.24
Totals	0.86	0.07	-1.31	-0.38

Table A9.6. *Relationship between 'race' and financial coping*

OBSERVED FREQUENCIES	B	C/I	W	Totals
Not coping financially	172	20	18	210
Coping financially	117	40	118	275
Totals	289	60	136	485

EXPECTED FREQUENCIES	B	C/I	W	Totals
Not coping financially	125.13	25.98	58.89	210
Coping financially	163.87	34.02	77.11	275
Totals	289	60	136	485

STANDARDIZED RESIDUALS	B	C/I	W	Totals
Not coping financially	4.19	-1.17	-5.33	-2.31
Coping financially	-3.66	1.03	4.66	2.02
Totals	0.53	-0.15	-0.67	-0.29

Table A9.7. *Relationship between 'race' and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<16	SRQ total≥16	Totals
Black	206	73	17	296
Coloured/Indian	43	13	5	61
White	101	33	3	137
Totals	350	119	25	494

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<16	SRQ total≥16	Totals
Black	209.72	71.3	14.98	296
Coloured/Indian	43.22	14.69	3.09	61
White	97.06	33	6.93	137
Totals	350	119	25	494

Table A9.8. *Relationship between gender and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Females	227	85	20	332
Males	140	38	5	183
Total	367	123	25	515

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Females	236.59	79.29	16.12	332
Males	130.41	43.71	8.88	183
Total	334	155	26	515

Table A9.9. *Relationship between subjective sense of adjustment to UCT and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not adjusted	20	18	12	50
Adjusted	343	104	13	460
Totals	363	122	25	510

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not adjusted	35.59	11.96	2.45	50
Adjusted	327.41	110.04	22.55	460
Totals	363	122	25	510

STANDARDIZED RESIDUALS	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not adjusted	-2.61	1.75	6.1	5.23
Adjusted	0.86	-0.58	-2.01	-1.73
Totals	-1.75	1.17	4.09	3.51

Table A9.9.1. *With 2 categories of minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Not adjusted	20	30	50
Adjusted	343	117	460
Totals	363	147	510

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Not adjusted	35.59	14.41	50
Adjusted	327.41	132.59	460
Totals	363	147	510

Odds Ratio = ad/bc = 4.4

95% confidence interval

$\log_e OR = 1.48$

$SE(\log_e OR) = 0.31$

$1.48-(1.96 \times 0.31)$ to $1.48+(1.96 \times 0.31)$

$= e^{0.8724}$ to $e^{2.0876}$

= 2.39 to 8.07

Table A9.10. *Relationship between students' reported reasons for attendance and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Emotional	4	9	9	22
Medical	315	96	13	424
Totals	319	105	22	446

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Emotional	15.74	5.18	1.09	22
Medical	303.26	99.82	20.91	424
Totals	319	105	22	446

STANDARDIZED RESIDUALS	SRQ total<8	8≤SRQ total<15	SRQ total ≥15	Totals
Emotional	-2.96	1.68	7.6	6.32
Medical	0.67	-0.38	-1.73	-1.44
Totals	-2.28	1.3	5.87	4.88

Table A9.10.1. *With 2 categories of minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Emotional	4	18	22
Medical	315	109	424
Totals	319	127	446

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Emotional	15.74	6.26	22
Medical	303.26	120.74	424
Totals	319	105	446

Odds Ratio = ad/bc = 12.9
95% confidence interval
$\log_e OR = 2.55$
$SE(\log_e OR) = 0.56$
$2.55-(1.96 \times 0.56)$ to $2.55+(1.96 \times 0.56)$
$= e^{1.4524}$ to $e^{3.6476}$
= 4.27 to 38.38

Table A9.11. *Relationship between gender and students' reported reasons for attendance '*

OBSERVED FREQUENCIES	FEMALE	MALE	Totals
Emotional	16	6	22
Medical	276	148	424
Totals	292	154	446

EXPECTED FREQUENCIES	FEMALE	MALE	Totals
Emotional	14.4	7.6	22
Medical	277.6	146.4	424
Totals	292	154	446

Table A9.12. *Relationship between scores on the SRQ and consultation with a mental health professional*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not seen MHP	280	72	11	363
Consultation with MHP	68	45	14	127
Totals	348	117	25	490

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not seen MHP	257.80	86.68	18.52	363
Consultation with MHP	90.2	30.32	6.48	127
Totals	348	117	25	490

STANDARDIZED RESIDUALS	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
Not seen MHP	1.38	-1.58	-1.75	-1.94
Consultation with MHP	-2.34	2.67	2.95	3.28
Totals	-0.95	1.09	1.21	1.34

Table A9.12.1. *With 2 categories of minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Not seen MHP	280	83	363
Consultation with MHP	68	59	127
Totals	348	142	490

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
Not seen MHP	257.8	105.2	363
Consultation with MHP	90.2	36.8	127
Totals	348	142	490

Odds Ratio = ad/bc = 2.9
95% confidence interval
$\log_e OR = 1.06$
$SE(\log_e OR) = 0.2$
$1.06-(1.96 \times 0.2)$ to $1.06+(1.96 \times 0.2)$
$= e^{0.668}$ to $e^{1.452}$
= 1.95 to 4.27

Tables A9.13. *Relationship between categories of trauma and PTSD*

Table A9.13.1. *Relationship between PTSD and beatings*

OBSERVED FREQUENCIES	No beating	Beating	Totals
No PTSD	178	37	215
PTSD	35	17	52
Totals	213	54	267

EXPECTED FREQUENCIES	No beating	Beating	Totals
No PTSD	171.52	43.48	215
PTSD	41.48	10.51	52
Totals	213	54	267

Odds Ratio = ad/bc = 2.34
95% confidence interval
$\log_e OR = 0.85$
$SE(\log_e OR) = 0.35$
$0.85-(1.96 \times 0.35)$ to $0.85+(1.96 \times 0.35)$
$= e^{0.164}$ to $e^{1.536}$
= 1.18 to 4.65

Table A9.13.2. *Relationship between PTSD and bereavement*

OBSERVED FREQUENCIES	No bereavement	Bereavement	Totals
No PTSD	211	4	215
PTSD	50	2	52
Totals	261	6	267

EXPECTED FREQUENCIES	No bereavement	Bereavement	Totals
No PTSD	210.17	4.83	215
PTSD	50.83	1.17	52
Totals	261	6	267

Table A9.13.3. *Relationship between PTSD and car accidents*

OBSERVED FREQUENCIES	No car accident	Car accident	Totals
No PTSD	170	45	215
PTSD	47	5	52
Totals	217	50	267

EXPECTED FREQUENCIES	No car accident	Car accident	Totals
No PTSD	174.74	40.26	215
PTSD	42.26	9.74	52
Totals	217	50	267

Table A9.13.4. *Relationship between PTSD and knife attacks*

OBSERVED FREQUENCIES	No knife attack	Knife attack	Totals
No PTSD	178	37	215
PTSD	41	11	52
Totals	219	48	267

EXPECTED FREQUENCIES	No knife attack	Knife attack	Totals
No PTSD	176.35	38.65	215
PTSD	42.65	9.35	52
Totals	219	48	267

Table A9.13.5. *Relationship between PTSD and 'other' traumatic events*

OBSERVED FREQUENCIES	No 'other' trauma	'other' trauma	Totals
No PTSD	165	50	215
PTSD	41	11	52
Totals	206	61	267

EXPECTED FREQUENCIES	No 'other' trauma	'other' trauma	Totals
No PTSD	165.88	49.12	215
PTSD	40.12	11.88	52
Totals	206	61	267

Table A9.13.6. *Relationship between PTSD and sexual assaults*

OBSERVED FREQUENCIES	No sexual assault	Sexual assault	Totals
No PTSD	196	19	215
PTSD	36	16	52
Totals	232	35	267

EXPECTED FREQUENCIES	No sexual assault	Sexual assault	Totals
No PTSD	186.82	28.18	215
PTSD	45.18	6.82	52
Totals	232	35	267

Odds Ratio = ad/bc = 4.6
95% confidence interval
$\log_e OR = 1.52$
$SE(\log_e OR) = 0.38$
$1.52-(1.96 \times 0.38)$ to $1.52+(1.96 \times 0.38)$
$= e^{0.7752}$ to $e^{2.2648}$
= 2.17 to 9.63

Table A9.13.7. *Relationship between PTSD and shooting incidents*

OBSERVED FREQUENCIES	No Shooting	Shooting	Totals
No PTSD	178	37	215
PTSD	43	9	52
Totals	221	46	267

EXPECTED FREQUENCIES	No Shooting	Shooting	Totals
No PTSD	178	37	215
PTSD	43.04	8.96	52
Totals	221	46	267

Table A9.13.8. *Relationship between PTSD and threats*

OBSERVED FREQUENCIES	No threat	Threat	Totals
No PTSD	167	48	215
PTSD	38	14	52
Totals	205	62	267

EXPECTED FREQUENCIES	No threat	Threat	Totals
No PTSD	165.07	49.93	215
PTSD	39.93	12.07	52
Totals	205	62	267

Table A9.14. *Relationship between PTSD and multiple/single traumatic events*

OBSERVED FREQUENCIES	Multiple	Single	Totals
No PTSD	44	171	215
PTSD	16	36	52
Totals	60	207	267

EXPECTED FREQUENCIES	Multiple	Single	Totals
No PTSD	48.31	166.69	215
PTSD	11.69	40.31	52
Totals	60	207	267

Table A9.15. *Relationship between PTSD*[60] *and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
No PTSD	357	104	12	473
PTSD	10	19	13	42
Totals	367	123	25	515

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
No PTSD	337.07	112.97	22.96	473
PTSD	29.93	10.03	2.04	42
Totals	367	123	25	515

STANDARDIZED RESIDUALS	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
No PTSD	1.11	-0.85	-2.32	-2.06
PTSD	-3.67	2.82	7.66	6.8
Totals	-2.56	1.96	5.34	4.74

[60] *Excluding PTSD criteria C4 and D1*

Table A9.15.1. *With 2 categories of minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
No PTSD	357	116	473
PTSD	10	32	42
Totals	367	148	515

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	Totals
No PTSD	337.07	135.93	473
PTSD	29.93	12.07	42
Totals	367	148	515

Odds Ratio = ad/bc = 9.85
95% confidence interval
$\log_e OR = 2.29$
$SE(\log_e OR) = 0.38$
$2.29-(1.96 \times 0.38)$ to $2.29+(1.96 \times 0.38)$
$= e^{1.5452}$ to $e^{3.0348}$
= 4.7 to 20.8

Table A9.16. *Relationship between PTSD and gender*

OBSERVED FREQUENCIES	FEMALE	MALE	Totals
No PTSD	294	169	463
PTSD	38	14	52
Totals	332	183	515

EXPECTED FREQUENCIES	FEMALE	MALE	Totals
No PTSD	298.48	164.52	463
PTSD	33.52	18.48	52
Totals	332	183	515

Table A9.17. *Relationship between minor psychiatric morbidity and the frequency of alcohol consumption*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily	6	4	10
3-4 x/week	11	4	15
1-2 x/week	72	31	103
1-2 x/month	71	25	96
Less often	70	32	102
Never	129	51	180
Totals	359	147	506

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily	7.1	2.91	10
3-4 x/week	10.64	4.36	15
1-2 x/week	73.08	29.92	103
1-2 x/month	68.11	27.89	96
Less often	72.37	29.63	102
Never	127.71	52.29	180
Totals	359	147	506

Table A9.18. *Relationship between minor psychiatric morbidity and 'binge drinking'*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily + 3-4 days/week	4	7	11
1-2 days/week	29	9	38
1-2 days/month	46	20	66
Less often/never	148	57	205
Totals	227	93	320

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily + 3-4 days/week	7.80	3.2	11
1-2 days/week	26.96	11.04	38
1-2 days/month	46.82	19.18	66
Less often/never	145.42	59.58	205
Totals	227	93	320

Table A9.19. *Relationship between minor psychiatric morbidity and 'problem drinking'*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily or weekly	3	6	9
Monthly	13	6	19
Less often	49	22	71
Never	157	59	216
Totals	222	93	315

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily or weekly	6.34	2.66	9
Monthly	13.39	5.61	19
Less often	50.04	20.96	71
Never	152.23	63.77	216
Totals	222	93	315

Table A9.20. *Relationship between frequency of alcohol consumption and gender*

OBSERVED FREQUENCIES	Female	Male	TOTALS
Daily	6	4	10
3-4 x/week	8	7	15
1-2 x/week	61	42	103
1-2 x/month	54	42	96
Less often	72	30	102
Never	127	53	180
Totals	328	178	506

EXPECTED FREQUENCIES	Female	Male	TOTALS
Daily	6.48	3.52	10
3-4 x/week	9.72	5.28	15
1-2 x/week	66.77	36.23	103
1-2 x/month	62.23	33.77	96
Less often	66.12	35.88	102
Never	116.68	63.32	180
Totals	328	178	506

Table A9.21. *Relationship between 'binge drinking' and gender*

OBSERVED FREQUENCIES	Female	Male	TOTALS
Daily + 3-4 days/week	3	8	11
1-2 days/week	17	21	38
1-2 days/month	33	33	66
Less often/never	141	64	205
Totals	194	126	320

EXPECTED FREQUENCIES	Female	Male	TOTALS
Daily + 3-4 days/week	6.67	4.33	11
1-2 days/week	23.04	14.96	38
1-2 days/month	40.01	25.99	66
Less often/never	124.28	80.72	205
Totals	194	126	320

STANDARDIZED RESIDUALS	Female	Male	TOTALS
Daily + 3-4 days/week	-1.42	1.76	0.34
1-2 days/week	-1.26	1.56	0.30
1-2 days/month	-1.11	1.38	0.27
Less often/never	1.5	-1.86	-0.36
Totals	-2.29	2.84	0.55

Table A9.22. *Relationship between 'problem drinking' and gender*

OBSERVED FREQUENCIES	Female	Male	TOTALS
Daily or weekly	2	7	9
Monthly	6	13	19
Less often	34	37	71
Never	150	66	216
Totals	192	123	315

EXPECTED FREQUENCIES	Female	Male	TOTALS
Daily or weekly	5.49	3.51	9
Monthly	11.58	7.42	19
Less often	43.28	27.72	71
Never	131.66	84.34	216
Totals	192	123	315

STANDARDIZED RESIDUALS	Female	Male	TOTALS
Daily or weekly	-1.49	1.86	0.37
Monthly	-1.64	2.05	0.41
Less often	-1.41	1.76	0.35
Never	1.6	-2	-0.4
Totals	-2.94	3.67	0.73

Table A9.23. *Relationship between the frequency of alcohol consumption and 'race'*

OBSERVED FREQUENCIES	BLACK	C/I	WHITE	TOTALS
Daily	3	0	6	9
3-4 x/week	3	1	11	15
1-2 x/week	31	6	64	101
1-2 x/month	42	17	33	92
Less often	68	10	17	95
Never	141	26	6	173
Totals	288	60	137	485

EXPECTED FREQUENCIES	Black	C/I	White	Totals
Daily	5.34	1.11	2.54	9
3-4 x/week	8.91	1.86	4.24	15
1-2 x/week	59.98	12.49	28.53	101
1-2 x/month	54.63	11.38	25.99	92
Less often	56.41	11.75	26.84	95
Never	102.73	21.4	48.87	173
Totals	137	60	288	485

STANDARDIZED RESIDUALS	Black	C/I	White	Totals
Daily	-1.01	-1.06	2.17	0.1
3-4 x/week	-1.2	-0.63	3.29	0.68
1-2 x/week	-3.74	-1.84	6.64	1.06
1-2 x/month	-1.71	1.67	1.38	1.33
Less often	1.54	-0.51	-1.9	-0.87
Never	3.78	0.99	-6.13	-1.36
Totals	-3.13	-1.37	5.44	0.94

Table A9.24. *Relationship between 'binge drinking' and 'race'*

OBSERVED FREQUENCIES	Black	C/I	White	Totals
Daily + 3-4 days/week	7	1	3	11
1-2 days/week	14	1	23	38
1-2 days/month	28	7	27	62
Less often/never	94	24	78	196
Totals	143	33	131	307

EXPECTED FREQUENCIES	Black	C/I	White	Totals
Daily + 3-4 days/week	5.12	1.18	4.69	11
1-2 days/week	17.70	4.08	16.22	38
1-2 days/month	28.88	6.66	26.46	62
Less often/never	91.3	21.07	83.64	196
Totals	131	33	143	307

Table A9.25. *Relationship between 'problem drinking' and 'race'*

OBSERVED FREQUENCIES	Black	C/I	White	Totals
Daily or weekly	9	0	0	9
Monthly	8	1	10	19
Less often	29	8	31	68
Never	96	23	88	207
Totals	142	32	129	303

EXPECTED FREQUENCIES	Black	C/I	White	Totals
Daily or weekly	4.22	0.95	3.83	9
Monthly	8.9	2.01	8.09	19
Less often	31.87	7.18	28.95	68
Never	97.01	21.86	88.13	207
Totals	142	32	129	303

Table A9.26. *Relationship between frequency of alcohol consumption and interference with academic work requirements*

OBSERVED FREQUENCIES	No	Yes	TOTALS
Daily	5	5	10
3-4 x/week	11	3	14
1-2 x/week	91	12	103
1-2 x/month	88	6	94
Less often	92	5	97
Totals	287	31	318

EXPECTED FREQUENCIES	No	Yes	TOTALS
Daily	9.03	0.97	10
3-4 x/week	12.64	1.36	14
1-2 x/week	92.96	10.04	103
1-2 x/month	84.84	9.16	94
Less often	87.54	9.46	97
Totals	287	31	318

STANDARDIZED RESIDUALS	No	Yes	TOTALS
Daily	-1.34	4.08	2.74
3-4 x/week	-0.46	1.4	0.94
1-2 x/week	-0.2	0.62	0.42
1-2 x/month	0.34	-1.05	-0.7
Less often	0.48	-1.45	-0.97
Totals	-1.18	3.6	2.42

Table A9.27. *Relationship between 'binge drinking' and interference with academic work requirements.*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	5	6	11
1-2 days/week	27	10	37
1-2 days/month	60	6	66
Less often/never	194	9	203
Totals	286	31	317

EXPECTED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	9.92	1.08	11
1-2 days/week	33.38	3.62	37
1-2 days/month	59.55	6.45	66
Less often/never	183.15	19.85	203
Totals	286	31	317

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily + 3-4 days/week	-1.56	4.75	3.18
1-2 days/week	-1.1	3.35	2.25
1-2 days/month	0.06	-0.18	-0.12
Less often/never	0.8	-2.44	-1.63
Totals	-1.81	5.49	3.68

Table A9.28. *Relationship between 'problem drinking' and interference with academic work requirements*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily or weekly	4	5	9
Monthly	14	5	19
Less often	58	12	70
Never	205	9	214
Totals	281	31	312

EXPECTED FREQUENCIES	No	Yes	Totals
Daily or weekly	8.12	0.89	9
Monthly	17.11	1.89	19
Less often	63.04	6.96	70
Never	192.74	21.26	214
Totals	281	31	312

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily or weekly	-1.44	4.34	2.9
Monthly	-0.75	2.27	1.51
Less often	-0.64	1.91	1.28
Never	0.88	-2.66	-1.78
Totals	-1.95	5.86	3.91

Table A9.29. *Relationship between the frequency and extent of cannabis consumption and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily or weekly	15	6	21
Monthly	15	4	19
Less often	45	17	62
Never	258	109	367
Totals	333	136	469

EXPECTED FREQUENCIES	SRQ total<8	SRQ total≥8	TOTALS
Daily or weekly	14.91	6.09	21
Monthly	13.49	5.51	19
Less often	44.02	17.98	62
Never	260.58	106.42	367
Totals	333	136	469

Table A9.30. *Relationship between the frequency and extent of cannabis consumption and gender*

OBSERVED FREQUENCIES	Female	Male	TOTALS
Daily or weekly	10	11	21
Monthly	10	9	19
Less often	44	18	62
Never	237	130	367
Totals	301	168	469

EXPECTED FREQUENCIES	Female	Male	TOTALS
Daily or weekly	13.48	7.52	21
Monthly	12.19	6.81	19
Less often	39.79	22.21	62
Never	235.54	131.46	367
Totals	301	168	469

Table A9.31. *Relationship between the frequency and extent of cannabis consumption and 'race'*

OBSERVED FREQUENCIES	Black	C/I	W	Totals
Daily or weekly	9	3	9	21
Monthly	6	1	11	18
Less often	21	7	31	59
Never	224	43	86	353
Totals	260	54	137	451

EXPECTED FREQUENCIES	Black	C/I	White	Totals
Daily or weekly	12.11	2.51	6.38	21
Monthly	10.38	2.16	5.47	18
Less often	34.01	7.06	17.92	59
Never	203.50	42.27	107.23	353
Totals	260	54	137	451

STANDARDIZED RESIDUALS	Black	C/I	White	Totals
Daily or weekly	-0.89	0.31	1.04	0.45
Monthly	-1.36	-0.79	2.37	0.22
Less often	-2.23	-0.02	3.09	0.83
Never	1.44	0.11	-2.05	-0.50
Totals	-3.05	-0.39	4.44	1

Table A9.32. *Relationship between the use of 'hard drugs' and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
No	353	116	24	493
Yes	14	7	1	22
Totals	367	123	25	515

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
No	351.32	117.75	23.93	493
Yes	15.68	5.25	1.07	22
Totals	367	123	25	515

Table A9.33. *Relationship between the use of 'hard drugs' and gender*

OBSERVED FREQUENCIES	Female	Male	Totals
No	320	173	493
Yes	12	10	22
Totals	332	183	515

EXPECTED FREQUENCIES	Female	Male	Totals
No	317.82	175.18	493
Yes	14.18	7.82	22
Totals	332	183	515

Table A9.34. *Relationship between the use of 'hard drugs' and 'race'*

OBSERVED FREQUENCIES	Black	C/I	White	Totals
No	296	56	120	472
Yes	0	5	17	22
Totals	296	61	137	494

EXPECTED FREQUENCIES	Black	C/I	White	Totals
No	282.82	58.28	130.9	472
Yes	13.18	2.72	6.1	22
Totals	296	61	137	494

STANDARDIZED RESIDUALS	Black	C/I	White	Totals
No	0.78	-0.3	-0.95	-0.47
Yes	-3.63	1.39	4.41	2.17
Totals	-2.85	1.09	3.46	1.7

Table A9.35. *Relationship between HSR ratings and minor psychiatric morbidity*

OBSERVED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
1	213	68	7	288
2	26	26	10	62
3	118	28	8	154
Totals	357	122	25	504

EXPECTED FREQUENCIES	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
1	204	69.71	14.29	288
2	43.92	15.01	3.08	62
3	109.08	37.28	7.64	154
Totals	357	122	25	504

STANDARDIZED RESIDUALS	SRQ total<8	8≤SRQ total<15	SRQ total≥15	Totals
1	0.63	-0.21	-1.93	-1.5
2	-2.7	2.84	3.95	4.08
3	0.85	-1.52	0.13	-0.54
Totals	-1.22	1.11	2.15	2.04

Table A9.36. *Relationship between HSR ratings and gender*

OBSERVED FREQUENCIES	Female	Male	Totals
1	148	140	288
2	34	28	62
3	144	10	154
TOTALS	326	178	504

EXPECTED FREQUENCIES	Female	Male	Totals
1	186.29	101.71	288
2	40.10	21.9	62
3	99.61	54.39	154
TOTALS	326	178	504

STANDARDIZED RESIDUALS	Female	Male	Totals
1	-2.81	3.8	0.99
2	-0.96	1.3	0.34
3	4.45	-6.02	-1.57
TOTALS	0.68	-0.92	-0.24

Table A9.37. *Relationship between HSR ratings and 'race'*

OBSERVED FREQUENCIES	Black	C/I	White	Totals
1	168	38	67	273
2	41	6	12	59
3	81	14	57	152
Totals	290	58	136	484

EXPECTED FREQUENCIES	Black	C/I	White	Totals
1	163.57	32.72	76.71	273
2	35.35	7.07	16.58	59
3	91.07	18.22	42.71	152
Totals	290	58	136	484

STANDARDIZED RESIDUALS	Black	C/I	White	Totals
1	0.35	0.92	-1.11	0.16
2	0.95	-0.40	-1.12	-0.58
3	-1.06	-0.99	2.19	0.14
Totals	0.24	-0.47	-0.47	-0.27

Table A9.38. *Relationship between HSR ratings and practitioners' diagnoses*

OBSERVED FREQUENCIES	MEDICAL	EMOTIONAL	TOTALS
1	277	7	284
2	15	47	62
3	152	0	152
TOTALS	444	54	498

EXPECTED FREQUENCIES	MEDICAL	EMOTIONAL	TOTALS
1	253.21	30.8	284
2	55.28	6.72	62
3	135.52	16.48	152
TOTALS	444	54	498

STANDARDIZED RESIDUALS	MEDICAL	EMOTIONAL	TOTALS
1	1.5	-4.29	-2.79
2	-5.42	15.53	10.12
3	1.42	-4.06	-2.64
TOTALS	-2.51	7.19	4.68

APPENDIX 10

Tables of non-significant comparisons

List of Tables

PAGES

Table A10.1. *Relationship between 'race' and sense of adjustment and sense of coping academically*

'RACE'	SENSE OF ADJUSTMENT						SENSE OF COPING ACADEMICALLY					
	Yes		No		Total		Yes		No		Total	
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*
B	258	88	34	12	292	100	247	84	48	16	295	100
C/I	55	90	6	10	61	100	50	86	8	14	58	100
W	129	94	8	6	137	100	128	93	9	7	137	100
Total	442		48		490		425		65		490	
χ^2	3.56						7.67					
df	2						2					
p	> .17						> .02					

* %'s represent %'s of racial categories

Table A10.2. *Relationship between MPM, 'race' and gender*

MPM	RACE							GENDER				
	B		C/I		W		Total	F		M		Total
	n	%*	n	%*	n	%*	n	n	%*	n	%*	n
SRQ total<8	206	69	43	71	101	74	350	204	61	130	71	334
8≤SRQ total<15	73	25	13	21	33	24	119	108	33	47	26	155
SRQ total≥15	17	6	5	8	3	2	25	20	6	6	3	26
Total	296	100	61	100	137	100	494	332	100	183	100	515
χ^2	4.13							4.88				
df	4							2				
p	> .39							> .09				

* *%'s represent %'s of racial categories, gender categories and categories of adjustment*

Table A10.3. *Relationship between students' reported reasons for attendance and gender*

GENDER	'REPORTED REASONS FOR ATTENDANCE'					
	Emotional		Medical		Totals	
	n	%*	n	%	n	%
Female	16	5	276	95	292	100
Male	6	4	148	96	154	100
Total	22		424		446	
χ^2	0.54					
df	1					
p	>.46					

* %'s represent %'s of gender categories

Table A10.4. *Relationship between PTSD and multiple/single traumatic events*

FREQUENCY OF EVENTS	Posttraumatic Stress Disorder					
	Yes		No		Totals	
	n	%*	n	%	n	%
Single	36	83	171	17	207	100
Multiple	16	73	44	27	60	100
Totals	52		215		267	
χ^2	2.55					
df	1					
p	> .11					

* %'s represent %'s of multiple/single traumatic events

Table A10.5. *Relationship between PTSD and gender*

GENDER	Posttraumatic Stress Disorder					
	Yes		No		Totals	
	n	%*	n	%	n	%
Female	38	64	294	36	332	100
Male	14	73	169	27	183	100
Total	52		463		515	
χ^2	1.87					
df	1					
p	> .17					

* %'s represent %'s of gender categories

Table A10.6. *Relationship between the frequency and extent of alcohol consumption and MPM*

MPM	ALCOHOL CONSUMPTION												
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		never		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n
SRQ total<8	6	60	11	73	72	70	71	74	70	69	129	72	359
SRQ total≥8	4	40	4	27	31	30	25	26	32	31	51	28	147
totals	10	100	15	100	103	100	96	100	102	100	180	100	506
χ^2	1.41												
df	5												
p	> .92												

MPM	'BINGE DRINKING'								
	1a		2a		3a		4a		totals
	n	%*	n	%*	n	%*	n	%*	n
SRQ total<8	4	36	29	76	46	70	148	72	227
SRQ total≥8	7	64	9	24	20	30	57	28	93
totals	11	100	38	100	66	100	205	100	320
χ^2	7.12								
df	3								
p	> .07								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1a = daily/ 3-4 times a week
2a = 1-2 times a week
3a = monthly
4a = less often/never

MPM	'PROBLEM DRINKING'								
	1b		2b		3b		4b		totals
	n	%*	n	%*	n	%*	n	%*	n
SRQ total<8	3	33	13	68	49	69	157	73	222
SRQ total≥8	6	67	6	32	22	31	59	27	93
totals	9	100	19	100	71	100	216	100	315
χ^2	6.59								
df	3								
p	> .09								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1b = daily/weekly
2b = monthly
3b = less often
4b = never

Table A10.7. *Relationship between gender, the frequency of alcohol consumption and 'binge drinking'*

GENDER	ALCOHOL CONSUMPTION												
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		never		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n
F	6	60	8	53	61	59	54	56	72	71	127	71	328
M	4	40	7	47	42	41	42	44	30	29	53	29	178
totals	10	100	15	100	103	100	96	100	102	100	180	100	506
χ^2	9.56												
df	5												
p	> .09												

GENDER	'BINGE DRINKING'								
	dly/3-4w		1-2/wk		monthly		less/nvr		total
	n	%*	n	%*	n	%*	n	%*	n
F	3	27	17	45	33	50	141	69	194
M	8	73	21	55	33	50	64	31	126
Totals	11	100	38	100	66	100	205	100	320
χ^2	17.9								
df	3								
p	> .0005								

* %'s represent %'s of categories of frequencies of alcohol consumption

Table A10.8. *Relationship between the extent of alcohol consumption and 'race'*

'RACE'	'BINGE DRINKING'								
	1a		2a		3a		4a		totals
	n	%*	n	%*	n	%*	n	%*	n
B	7	64	14	37	28	45	94	48	143
C/I	1	9	1	3	7	11	24	12	33
W	3	27	23	60	27	44	78	40	131
totals	11	100	38	100	62	100	196	100	307
χ^2	8.19								
df	6								
p	> .22								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1a = daily/ 3-4 times a week
2a = 1-2 times a week
3a = monthly
4a = less often/never

'RACE'	'PROBLEM DRINKING'								
	1b		2b		3b		4b		totals
	n	%*	n	%*	n	%*	n	%*	n
B	9	100	8	42	29	43	96	46	142
C/I	0	0	1	5	8	12	23	11	32
W	0	0	10	53	31	45	88	43	129
totals	9	100	19	100	68	100	207	100	303
χ^2	11.82								
df	6								
p	> .07								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1b = daily/weekly
2b = monthly
3b = less often
4b = never

Table A10.9. *Relationship between cannabis consumption, MPM and gender*

FREQUENCY OF CANNABIS CONSUMPTION	MPM						GENDER					
	SRQ total<8		SRQ total≥8		Totals		F		M		Totals	
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*
d/w	15	71	6	29	21	100	10	48	11	52	21	100
m	15	79	4	21	19	100	10	53	9	47	19	100
lo	45	73	17	27	62	100	44	71	18	29	62	100
n	258	70	109	30	367	100	237	65	130	35	367	100
T	333		136		469		301		168		469	
χ^2	0.75						4.88					
df	3						3					
p	> .86						> .18					

* %'s represent %'s of categories of frequencies of cannabis consumption
* key d/w = daily/weekly

Table A10.10. *Relationship between use of 'hard drugs', MPM and gender*

USE OF 'HARD DRUGS'	MPM						GENDER					
	SRQ total<8		SRQ total≥8		Totals		F		M		Totals	
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Y	14	64	8	36	22	100	12	55	10	45	22	100
N	353	72	140	28	493	100	320	65	173	35	493	100
T	367		148		515		332		183		515	
χ^2	0.65						0.99					
df	1						1					
p	> .42						> .32					

* %'s represent %'s of categories of frequencies of drug consumption
* key Y= yes
N= no

Table A10.11. *Relationship between HSR ratings and 'race'*

HSR RATINGS	'RACE'							
	Black		Coloured/Indian		White		Total	
	n	%*	n	%*	n	%*	n	%*
Physical	168	62	38	14	67	24	273	100
Emotional	41	70	6	10	12	20	59	100
No rating	81	53	14	9	57	38	152	100
Totals	290		58		136		484	
χ^2	11.4							
df	4							
p	> .02							

* %'s refer to %'s of HSR categories

APPENDIX 11

THE FREQUENCY OF OCCURRENCE OF INDIVIDUAL SRQ25 ITEMS

Table A11.1. indicates the frequency with which individual items on the SRQ were answered affirmatively or otherwise.

Table A11.1. *Frequency table of individual SRQ25 items*

SRQ ITEM	YES	NO	NON RESPONSE
1	205	308	2
2	77	435	3
3	159	354	2
4	130	382	3
5	105	409	1
6	246	266	3
7	104	401	10
8	133	379	3
9	145	366	4
10	77	434	4
11	127	386	2
12	154	361	0
13	133	374	8
14	111	398	6
15	119	390	6
16	47	468	0
17	82	430	3
18	179	331	5
19	192	323	0
20	229	285	1
21	67	446	2
22	180	306	29
23	109	400	6
24	27	486	2
25	43	469	3

APPENDIX 12

CONFIDENCE INTERVALS FOR PROPORTIONS

Confidence intervals for proportions were calculated using the following formula (Hays, 1991, p. 259)

$$\frac{N}{N+Z^2}\left(P + \frac{Z^2}{2N} \pm Z\sqrt{\frac{PQ}{N} + \frac{Z^2}{4N^2}}\right)$$

Where P = x/N

Where x = the number of events of a particular kind

N = the number of independent observations drawn

Q = 1 - P

1) Proportion of students scoring between 8 and 14 on the SRQ (24%) (95% CI is 19.8% to 27.7%)

2) Proportion of students scoring between 15 and 19 on the SRQ (5%) (95% CI is 3.4% to 7.1%)

3) Proportion of students scoring zero on the SRQ (14.17%) (95% CI is 11.7% to 17.2%)

4) Proportion of students who scored positively on the SRQ and who reported emotional reasons for attendance (14%) (95% CI is 7.9% to 19.6%)

5) Proportion of students who scored 15 or above on the SRQ and who reported emotional reasons for attendance (41%) (95% CI is 37.5% to 46.8%)

6) Proportion of students who reported emotional reasons for attendance and who scored 8 or above on SRQ (82%) (95% CI is 62.6% to 91%)

7) Proportion of students who scored 8 or above on the SRQ and who have previously consulted MHP's (42%) (95% CI is 33.8% to 49.7%)

8) Proportion of students who scored 15 or above on the SRQ and who have previously consulted MHP's (56%) (95% CI is 36.7% to 72.7%)

9) Proportion of students who have previously consulted a MHP at UCT SHS (30%) (95% CI is 22.6% to 38.3%)

10) Proportion of students who have previously consulted a MHP 'elsewhere' (55%) (95% CI is 46.3% to 63.3%)

11) Proportion of students who have previously consulted MHP's at SHS and elsewhere (15%) (95% CI is 9.8% to 22.2%)

12) Proportion of students who scored above 8 on the SRQ and have previoulsy consulted a MHP at SHS (37%) (95% CI is 25.7% to 49.8%).

13) Proportion of students who scored above 8 on the SRQ and have previously consulted a MHP 'elsewhere' (46%) (95% CI is 33.7% to 58.14%)

14) Proportion of students who scored above 8 on the SRQ and have previously consulted a MHP at SHS and 'elsewhere' (17%) (95% CI is 9.3% to 28.5%)

15) Proportion of students who have experienced trauma who have witnessed or experienced multiple traumatic events (22.5%) (95% CI is 17.7% to 28%).

16) Proportion of students who reported traumatic events who experienced the traumatic event on UCT campus (8.3%) (95% CI is 5.9% to 11.3%)

17) Proportion of students who drink daily (1.98%) (95% CI is 1.07% to 3.6%)

18) Proportion of students who drink 3-4 days/week (2.96%) (95% CI is 1.8% to 4.8%)

19) Proportion of students who drink 1-2 days/week (20.36%) (95% CI is 17% to 24%)

20) Proportion of students who drink 1-2 days/month (18.97%) (95% CI is 16% to 23%)

21) Proportion of students who drink less often than 1-2 days/month (20.16%) (95% CI is 16.9% to 24%)

22) Proportion of students who never consume alcohol (35.57%) (95% CI is 31.3% to 40%)

23) Proportion of students who 'binge drink' daily or 3-4 times a week (3.44%) (95% CI is 1.96% to 6%).

24) Proportion of students who 'binge drink' 1-2 days a week (11.8%) (95% CI is 9% to 15.7%)

25) Proportion of students who 'binge drink' 1-2 days a month (20.63%) (95% CI is 16.6% to 25.3%)

26) Proportion of students who 'binge drink' less often than 1-2 days/month or who never 'binge drink' (64.06%) (95% CI is 58.8% to 69.1%)

27) Proportion of students who 'problem drink' daily or weekly (2.86%) (95% CI is 1.52% to 5.4%)

28) Proportion of students who 'problem drink' monthly (6.03%) (95% CI is 3.9% to 9.2%)

29) Proportion of students who 'problem drink' less often than monthly (22.54%) (95% CI is 18.3% to 27.5%)

30) Proportion of students who never 'problem drink' (68.57%) (95% CI is 63% to 74%)

31) Proportion of students who smoke cannabis 1-2 days/month (4.05%) (2.7% to 6.2%)

32) Proportion of students who smoke cannabis less often (13.22%) (10.4% to 16.5%)

33) Proportion of students who never smoke cannabis (78.25%) (95% CI is 74% to 81.8%)

34) Proportion of students who scored 8 or above on the SRQ and were given a physical rating or no rating possible by medical practitioner (75%) (95% CI is 67.9% to 81.9%)

35) Proportion of students who scored below 8 on the SRQ and were given an emotional rating by medical practitioner (7.3%) (95% CI is 4.99% to 10.43%)

36) Proportion of students who scored 15 and above on the SRQ and were given an emotional rating by medical practitioner (40%) (95% CI is 23.4% to 59.3%)

37) Proportion of students assessed as having a physical health problem only and given a medical diagnosis (97.5%) (95% confidence interval is 95% to 98.9%)

38) Proportion of students assessed as having a mental health problem only or a mental and physical health problem and given an emotional diagnosis (75.8%) (95% CI is 63.8% to 84.8%).

APPENDIX 13

CUMULATIVE COUNTS AND PERCENTAGES OF SRQ20 TOTAL SCORES

Table A13.1. shows the cumulative counts and percentages of SRQ total scores.

Table A13.1. *Cumulative counts and percentages of SRQ total scores*

SRQ total score	count	cum.count	% of valid	cum. % of valid	% of all cases	Cum. % of all cases
0	73	73	14.18	14.17	14.18	14.18
1	58	131	11.26	25.44	11.26	25.44
2	49	180	9.52	34.95	9.52	34.95
3	34	214	6.60	41.55	6.60	41.55
4	35	249	6.80	48.35	6.80	48.35
5	39	288	7.57	55.92	7.57	55.92
6	46	334	8.93	64.85	8.93	64.85
7	33	367	6.41	71.26	6.41	71.26
8	30	397	5.83	77.09	5.83	77.09
9	28	425	5.44	82.52	5.44	82.52
10	17	442	3.30	85.83	3.30	85.83
11	25	467	4.85	90.68	4.85	90.68
12	8	475	1.55	92.23	1.55	92.23
13	6	481	1.17	93.40	1.17	93.40
14	9	490	1.75	95.15	1.75	95.15
15	6	496	1.17	96.31	1.17	96.31
16	7	503	1.36	97.67	1.36	97.67
17	4	507	0.78	98.45	0.78	98.45
18	5	512	0.97	99.42	0.97	99.42
19	3	515	0.58	100.00	0.58	100.00

APPENDIX 14

THE NUMBER AND NATURE OF MULTIPLE TRAUMATIC EVENTS

Table A14.1. indicates the number and nature of multiple traumatic events

Table A14.1. *The number and nature of multiple traumatic events*

Number of traumatic events	Nature of traumatic events
2	threat and shooting
2	beating and bereavement
2	shooting and other
2	beating and sexual assault
2	other and car accident
2	threat and other
2	threat and sexual assault
2	knife attack and other
2	knife attack and threat
2	car accident and other
2	car accident and knife attack
2	knife attack and other (mugging)
2	shooting and sexual assault
2	beating and knife attack
2	threat and beating
2	car accident and threat
2	beating and shooting
2	threat and shooting
2	beating and other
2	threat and beating
2	knife attack and shooting
2	beating and knife attack
2	threat and sexual assault
2	shooting and other
2	beating and sexual assault
2	threat and beating
2	beating and knife attack
2	beating and other
2	knife attack and other
2	threat and knife attack
2	threat and shooting
2	beating and knife attack
2	shooting and threat
2	threat and other
2	beating and sexual assault
2	car accident, threat
2	car accident and beating
3	car accident, knife, shooting
3	car accident, sexual assault, other
3	car accident, threat, beating
3	beating, knife attack, shooting
3	threat, beating, knife attack
3	beating, knife attack, sexual assault
3	beating, knife attack, shooting
3	threat, beating, shooting

Number of traumatic events	Nature of traumatic events
3	threat, knife attack, other
3	threat, beating, knife attack
3	threat, beating, shooting
3	threat, beating, shooting
3	threat, beating, knife attack
3	threat, beating, other (mugging)
4	threat, beating, knife, sexual assault
4	threat, beating, knife, shooting
4	threat, beating, knife, shooting
4	threat, beating, shooting, sexual assault
4	threat, beating, knife, shooting
4	car accident, beating, knife, shooting
4	threat, beating, knife, shooting
5	threat, beating, knife, shooting, sexual assault
6	threat, beating, knife attack, shooting, sexual assault, other

APPENDIX 15

TRAUMATIC EVENTS CATEGORIZED AS 'OTHER'

Table A15.1. describes traumatic events categorised as 'other'

Table A15.1. *Traumatic events categorised as 'other'*

Description of traumatic events categorized as 'other'
witnessed illegal termination of pregnancy
confined and teargassed
heart attack
home burnt down
'shocking out of sudden' *
drowning
drowning
witnessed person falling out of building + witnessed person being pulled out to sea
'black magical powers'*
convulsions due to cerebral haemorrhage
witnessing trauma in Groote Schuur hospital intensive care unit
speculations of HIV in sister's child
political violence
chased at night by car
'experience of confusion, burning sensation in head, heart beating fast'*
hijacking at gunpoint
house-fire - 2 brothers died
attempted assault - subsequently discovered man had stabbed 5 other people
on boat that would not steer - no control
witnessed person falling on train track
wife terminally ill
witnessed surfer being carried out to sea - waited 2 hours for assistance
'out of body experience' - thought was going to die*
witnessed brother fall out of building
'legal difficulties'*
heart attack and chain saw accident
political violence
stampeded, train robbery, fight, inexplicable convulsions
nightmare
racially based harassment from police
fits and convulsions
swept out to sea
slept with someone and later found out that she had died of AIDS
'irregular but severe paralysis of limbs'*
illness
stroke
friend fell down stairs
arrested
woke up during burglary - thief standing over bed
accused of theft and arrested
home burgled - lost most of belongings
'problem with husband'*
termination of pregnancy
mother admitted to hospital with 'burst tube in abdomen'*
ambush attack
car hijack
'trance'*
'saw things like ghosts while in bed one night'*
boyfriend's proposal of marriage to another woman
fight at soccer stadium
emotional abuse by father
car hijack

** as quoted by participant*

APPENDIX 16

RELATIONSHIP BETWEEN CURRENT POSTTRAUMATIC STRESS DISORDER AND TIME SINCE TRAUMATIC EVENT

List of tables

See Chapter 4, section 4.2.8.1. for comments on issues related to PTSD and DSMIV (American Psychiatric Association, 1994) specifiers of duration and onset. In this study, posttraumatic symptoms were classified as 'acute' if the trauma/s occurred any time in 1998 and as 'chronic' if the trauma/s occurred before 1998.

Based on this categorization, of those suffering from PTSD, 35 (67%) manifested 'chronic' symptoms, 7 (13.5%) manifested 'acute' symptoms, 3 (6%) showed a possible combination of 'chronic' and 'acute' symptoms and 7 (13.5%) failed to state the length of time since exposure to trauma.

Although this questionnaire was unable to satisfactorily differentiate between chronic and acute PTSD (see Chapter 4, section 4.2.8.1.2.), it nevertheless suggests that chronic PTSD may be the most prevalent. This accords with Davidson and Fairbank's (1992) assertion that 'overall, most epidemiological findings are consistent with the conceptualization of PTSD as a chronic disorder, rather than an acute or self-limited one.' (p. 155).

χ^2 analysis suggests that current PTSD and time since the traumatic event are not significantly related ($\chi^2 = 1.9$; df =2; $p > .39$). See Tables A15.1 and A15.2 below for χ^2 contingency tables.

Table A16.1. *Observed frequencies of the relationship between PTSD and time since traumatic event*

OBSERVED FREQUENCIES	CHRONIC	ACUTE	A/C	Totals
No PTSD	125	46	12	183
PTSD	35	7	3	45
Totals	160	53	15	228

Table A16.2. *Expected frequencies of the relationship between PTSD and time since traumatic event*

EXPECTED FREQUENCIES	CHRONIC	ACUTE	A/C	Totals
No PTSD	128.42	42.54	12.04	183
PTSD	31.58	10.46	2.96	45
Totals	160	53	15	228

APPENDIX 17

RELATIONSHIP BETWEEN FREQUENCY AND EXTENT OF ALCOHOL CONSUMPTION, BELIEF IN THE NEED TO REDUCE ALCOHOL CONSUMPTION AND COMPLAINTS/CONCERN BY FRIENDS/RELATIVES

List of Tables

PAGES

For statistical purposes (to allow expected frequencies >5), those students who never drink alcohol were eliminated from analyses in this section. Tables A17.1 -3 show the observed and expected frequencies and standardized residuals of alcohol consumption and belief in the need to reduce alcohol consumption, 'binge drinking' and belief in the need to reduce alcohol consumption and 'problem drinking' and belief in the need to reduce alcohol consumption.

Table A17.1. *Contingency tables of relationship between frequency of alcohol consumption and a feeling that one ought to reduce alcohol consumption.*

OBSERVED FREQUENCIES	No	Yes	TOTALS
Daily	3	7	10
3-4 x/week	9	6	15
1-2 x/week	66	37	103
1-2 x/month	73	20	93
Less often	62	32	94
Totals	213	102	315

EXPECTED FREQUENCIES	No	Yes	TOTALS
Daily	6.76	3.24	10
3-4 x/week	10.14	4.86	15
1-2 x/week	69.65	33.35	103
1-2 x/month	62.89	30.11	93
Less often	63.56	30.44	94
Totals	213	102	315

STANDARDIZED RESIDUALS	No	Yes	TOTALS
Daily	-1.45	2.09	0.64
3-4 x/week	-0.36	0.52	0.16
1-2 x/week	-0.44	0.63	0.19
1-2 x/month	1.28	-1.84	-0.57
Less often	-0.2	0.28	0.09
Totals	-1.16	1.68	0.52

Table A17.2. *Contingency tables of relationship between 'binge drinking' and the feeling that one ought to reduce alcohol consumption*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	3	8	11
1-2 days/week	19	19	38
1-2 days/month	38	28	66
Less often/never	151	48	199
Totals	211	103	314

EXPECTED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	7.39	3.61	11
1-2 days/week	25.54	12.47	38
1-2 days/month	44.35	21.65	66
Less often/never	133.72	65.28	199
Totals	211	103	314

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily + 3-4 days/week	-1.62	2.31	0.7
1-2 days/week	-1.29	1.85	0.56
1-2 days/month	-0.95	1.36	0.41
Less often/never	1.49	-2.14	-0.64
Totals	-2.37	3.39	1.02

Table A17.3. *Contingency tables of relationship between 'problem drinking' and the feeling that one ought to reduce alcohol consumption*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily or weekly	2	7	9
Monthly	11	8	19
Less often	38	33	71
Never	159	52	211
Totals	210	100	310

EXPECTED FREQUENCIES	No	Yes	Totals
Daily or weekly	6.1	2.9	9
Monthly	12.87	6.13	19
Less often	48.1	22.9	71
Never	142.94	68.06	211
Totals	210	100	310

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily or weekly	-1.66	2.4	0.75
Monthly	-0.52	0.76	0.23
Less often	-1.46	2.11	0.65
Never	1.34	-1.95	-0.6
Totals	-2.29	3.32	1.03

Table A17.4 outlines the proportions of students who, in accordance with alcohol consumption, 'binge drinking' and 'problem drinking', feel that they ought to cut down on their drinking.

Table A17.4. *Relationship between the frequency and extent of alcohol consumption and a feeling that one ought to reduce alcohol consumption*

BELIEF IN NEED TO REDUCE ALCOHOL CONSUMPTION	ALCOHOL CONSUMPTION										
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n
yes	7	70	6	40	37	36	20	22	32	34	102
no	3	30	9	60	66	64	73	78	62	66	213
totals	10	100	15	100	103	100	93	100	94	100	315
χ^2	12.59										
df	4										
p	> .01										

BELIEF IN NEED TO REDUCE ALCOHOL CONSUMPTION	'BINGE DRINKING'								
	1a		2a		3a		4a		totals
	n	%*	n	%*	n	%*	n	%*	n
yes	8	73	19	50	28	42	48	24	103
no	3	27	19	50	38	58	151	76	211
totals	11	100	38	100	66	100	199	100	314
χ^2	22.63								
df	3								
p	< .00005								
ϕ_c	0.27								

* %'s represent %'s of categories of frequencies of alcohol consumption
key :
1a = daily/ 3-4 times a week
2a = 1-2 times a week
3a = monthly
4a = less often/never

BELIEF IN NEED TO REDUCE ALCOHOL CONSUMPTION	'PROBLEM DRINKING'								
	1b		2b		3b		4b		totals
	n	%*	n	%*	n	%*	n	%*	n
yes	7	78	8	42	33	46	52	25	100
no	2	22	11	58	38	53	159	75	210
totals	9	100	19	100	71	100	211	100	310
χ^2	21.54								
df	3								
p	< .00008								
ϕ_c	0.26								

* %'s represent %'s of categories of frequencies of alcohol consumption
key :
1b = daily/weekly
2b = monthly
3b = less often
4b = never

The frequency of alcohol consumption and the feeling of participants that they should cut down on their drinking was shown to be unrelated ($p>0.01$).[61]

[61] *in accordance with the Bonferroni level of significance ($\alpha = 0.0002$; $\alpha' = 0.05$). See Chapter 2, section 2.9.*

'Binge drinking' and the feeling of participants that they should cut down on their drinking were shown to be moderately related ($p<0.00005$; $\phi_c=0.27$). Standardized residuals indicate that more than expected of those who 'binge drink' daily/3-4 times a week and those who drink 1-2 times a week believe that they should cut down on their drinking ($p<0.01$ and $p<0.03$ respectively). Fewer than expected of those who 'binge' less often/never feel that they should cut down on their drinking ($p<0.02$).

'Problem drinking' and the feeling of participants that they should cut down on their drinking were shown to be moderately related ($p<0.00008$; $\phi_c=0.26$). Standardized residuals indicate that more than expected of those who problem drink daily/weekly and those who 'problem drink' infrequently believe that they should cut down on their drinking ($p<0.01$ and $p<0.02$ respectively) and fewer than expected of those who never 'problem drink' feel that they should cut down on their drinking ($p<0.03$).

Contingency tables showing observed and expected frequencies and standardized residuals for the frequency and extent of alcohol consumption and concerns/complaints by friends/relatives are shown in tables A17, 5-7 below.

Table A17.5 *Contingency tables of relationship between frequency of alcohol consumption and concern/complaints by relatives/friends*

OBSERVED FREQUENCIES	No	Yes	TOTALS
Daily	7	3	10
3-4 x/week	13	2	15
1-2 x/week	93	10	103
1-2 x/month	88	6	94
Less often	91	6	97
Totals	292	27	319

EXPECTED FREQUENCIES	No	Yes	TOTALS
Daily	9.15	0.85	10
3-4 x/week	13.73	1.27	15
1-2 x/week	94.28	8.72	103
1-2 x/month	86.04	7.96	94
Less often	88.79	8.21	97
Totals	292	27	319

Table A17.6. *Contingency tables of relationship between 'binge drinking' and concern/complaints by relatives/friends*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	4	7	11
1-2 days/week	34	4	38
1-2 days/month	60	6	66
Less often/never	193	10	203
Totals	291	27	318

EXPECTED FREQUENCIES	No	Yes	Totals
Daily + 3-4 days/week	10.07	0.93	11
1-2 days/week	34.77	3 23	38
1-2 days/month	60.4	5.6	66
Less often/never	185.76	17.24	203
Totals	291	27	318

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily + 3-4 days/week	-1.91	6.28	4.36
1-2 days/week	-0.13	0.43	0.3
1-2 days/month	-0.05	0.17	0.12
Less often/never	0.53	-1.74	-1.21
Totals	-1.56	5.13	3.57

Table A17.7. *Contingency tables of relationship between 'problem drinking' and concern/complaints by relatives/friends*

OBSERVED FREQUENCIES	No	Yes	Totals
Daily or weekly	5	4	9
Monthly	15	4	19
Less often	58	13	71
Never	209	5	214
Totals	287	26	313

EXPECTED FREQUENCIES	No	Yes	Totals
Daily or weekly	8.25	0.75	9
Monthly	17.42	1.58	19
Less often	65.1	5.9	71
Never	196.22	17.78	214
Totals	287	26	313

STANDARDIZED RESIDUALS	No	Yes	Totals
Daily or weekly	-1.13	3.76	2.63
Monthly	-0.58	1.93	1.35
Less often	-0.88	2.92	2.04
Never	0.91	-3.03	-2.12
Totals	-1.68	5.58	3.9

Table A17.8 outlines the proportions of students who consume alcohol, 'binge drink' and 'problem drink' who have friends/relatives who worry or complain about their drinking.

Table A17.8. *Relationship between the frequency and extent of alcohol consumption and concern/complaints by relatives/friends*

COMPLAINTS BY FRIENDS/RELATIVES	ALCOHOL CONSUMPTION										
	daily		3-4x/wk		1-2x/wk		1-2x/mth		less often		total
	n	%*	n	%*	n	%*	n	%*	n	%*	n
yes	3	30	2	13	10	10	6	6	6	6	27
no	7	70	13	87	93	90	88	94	91	43	292
totals	10	100	15	100	103	100	94	100	97	100	319
χ^2	7.83										
df	4										
p	> .1										

COMPLAINTS BY FRIENDS/RELATIVES	'BINGE DRINKING'								
	1a		2a		3a		4a		totals
	n	%*	n	%*	n	%*	n	%*	n
yes	7	64	4	11	6	9	10	5	27
no	4	36	34	89	60	91	193	95	291
totals	11	100	38	100	66	100	203	100	318
χ^2	46.61								
df	3								
p	< .000004								
ϕ_c	0.38								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1a = daily/ 3-4 times a week
2a = 1-2 times a week
3a = monthly
4a = less often/never

COMPLAINTS BY FRIENDS/RELATIVES	'PROBLEM DRINKING'								
	1b		2b		3b		4b		totals
	n	%*	n	%*	n	%*	n	%*	n
yes	4	44	4	21	13	18	5	2	26
no	5	56	15	79	58	82	209	98	287
totals	9	100	19	100	71	100	214	100	313
χ^2	38.83								
df	3								
p	< .000004								
ϕ_c	0.35								

* %'s represent %'s of categories of frequencies of alcohol consumption

key :
1b = daily/weekly
2b = monthly
3b = less often
4b = never

χ^2 analysis suggests that the reported frequency of alcohol consumption and concern and complaints by relatives are not related ($p>0.1$). 'Binge drinking', however, is moderately/strongly related to concern and complaints by relatives ($p<0.000004$; $\phi_c=0.38$). Standardized residuals indicate that more than expected those who 'binge drink' daily/3-4 times a week have relatives/friends who are concerned and who complain about their drinking ($p<0.0000004$). Fewer than expected of those who 'binge drink' infrequently or never 'binge drink' have relatives/friends who show concern or complain about their drinking ($p<0.04$). 'Problem drinking' is also moderately/strongly related to concern and complaints by relatives/friends ($p<0.000004$; $\phi_c=0.35$). Standardized residuals show that more than expected of those who 'problem drink' daily/weekly, monthly or even infrequently are exposed to concern and complaints by friends/relatives ($p<0.00008$; $p<0.03$ and $p<0.002$ respectively). Fewer then expected of those who never 'binge drink' have relatives/friends who are concerned and complain about their drinking ($p<0.001$).

APPENDIX 18

Web pages advertising student counselling services

List of contents

A18.1. University of Wales Cardiff. The Student Counselling Service

The Student Counselling Service

We hope that your time at Cardiff University will be happy and trouble-free. However, everyone - at some time in their lives - may run into difficulties. For every kind of problem there are trained people at hand who may be able to offer support.

Some kinds of emotional or psychological issues can be explored by having counselling. Here at Cardiff there is a counselling service available to all students, undergraduate and postgraduate, free of charge. If you think that you would like to see a counsellor, **all you have to do is to telephone us on 4966 or email us at counselling@cardiff.ac.uk** and ask for an appointment.

In the meantime read on for some useful information:

- New! Postgraduate Group
- New! Study Skills and Stress Busting
- Frequently asked questions about counselling
- Send us your comments
- All about the counsellors
- Nightline - 8 pm to 8 am - phone: 382141

Some other useful links are:

- to read about a variety of common problems, including: sleep, anxiety, eating, memory, depression , social phobias and depression
- to read about depression as a treatable illness

Please do note that the links are only suggested sites; the Student Counselling Service is not responsible for the information that they contain.

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Return to Cardiff University Home Page

A18.2. Canterbury Christ Church College. Student Counselling Service

Canterbury Christ Church College

Student Counselling Service

What is counselling? | Who are the Counsellors?

Helpful Contacts | Practical Advice

Useful Web Sites | Useful Newsgroups

Bulletin Board

If you have any comments please send them to Margaret Simpson
This page is supported by The TITLE Unit
Last updated: 13th November, 1997

What is Counselling?

Coming to College can be a very exciting experience, offering opportunities for personal development, academically and socially. Sometimes, however, students may encounter personal problems for which they need help and support beyond that offered by tutors, friends or family.

The College offers *all* students a free, confidential Counselling Service, staffed by professional and experienced counsellors.

When can counselling help?

Counselling can help if you are experiencing personal problems, whether long-standing or resulting from a temporary crisis, that affect your academic or social life at College. Deciding to see a counsellor is a positive step towards making things better for yourself.

How does counselling work?

The counsellor will:

- listen carefully to what you say
- work with you so that you can see your situation more clearly
- help you discover and develop your own resources
- help you resolve your difficulties
- where appropriate, put you in touch with other sources of assistance within and outside of the College.

How long will it take?

Counselling sessions last up to 50 minutes, and are usually weekly. The number of sessions is negotiated during the first session - sometimes one may be sufficient or, more usually, several sessions may be appropriate.

How else can the Counselling Service help?

As well as working individually with students, the counselling service offers workshops from time to time on subjects like ***stress management, exam anxiety, assertiveness, confidence-building***, etc. We also organise **support groups** for students experiencing difficulties such as ***eating distress*** or ***bereavement***. Details are posted in these web pages, and on the counselling notice board outside the

Library.

How to get in touch

For an appointment, contact the counsellors direct:

Margaret Simpson on 01227 782233 or e-mail M.Simpson@canterbury.ac.uk
Jill Wiffen on 01227 782686 or e-mail J.E.Wiffen@canterbury.ac.uk

If we cannot take your call personally, please leave a contact number and we will can you as soon as possible.
Alternatively, written messages may be left in the student counsellors' letterbox, by the student pigeonholes.

If you have any comments please send them to Margaret Simpson
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Helpful Contacts

The Counselling Service is available to **all** students registered at Canterbury Christ Church College, and can offer help and advice on most personal problems. Other services available in this area which may be helpful, particularly in an emergency or during vacations , are listed below. If you feel so distressed that you think you might need medical or psychiatric help, you should contact your GP.

SAMARITANS
Ashford - 01233 610000
Canterbury - 01227 457777
Folkestone - 01303 255000

RELATE
Relationship Problems
Broadstairs - 01843 861228
Canterbury - 01227 766094
Chatham - 01634 846914
Folkestone - 01303 252798
Maidstone - 01622 677065
Sittingbourne - 01795 477770

CITIZENS ADVICE BUREAUX
Canterbury - 01227 761493
Dover - 01304 202567
Faversham - 01795 536996
Folkestone - 01303 220709
Herne Bay - 01227 363312
Margate - 01843 225972
Whitstable - 01227 264363

WAYMARK TRUST
Christian Counselling
Canterbury - 01227 781891

CATHOLIC MARRIAGE ADVISORY COUNCIL
Canterbury - 01227 780872

GAY COUNSELLING SERVICE
East Kent Friend
Thanet - 01843 588762

CRUSE
Bereavement Care
Canterbury - 01227 763898
Thanet - 01843 860857

KENT COUNCIL ON ADDICTION
Drugs / Alcohol
Canterbury - 01227 454740

TURNING POINT
Help with Alcohol Problems
Canterbury - 01227 454374

DRUGS ADVICE CENTRE
Ramsgate - 01843 596638

RAPELINE
Canterbury - 01227 450400

MEDWAY RAPE CRISIS CENTRE
(for Men and Women)
Medway - 01634 811703

AIDS HELPLINE
National (24 hrs) - 0800 567123
Folkestone - 01303 220018

WOMENS RESOURCE CENTRE
Canterbury - 01227 451753

If you have any comments please send them to Margaret Simpson
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Useful Web Sites

General Advice

Citizens Advice Bureau

AIDS and HIV

AVERT: AIDS Education and Research Trust

Eating Disorders

Eating Disorders

Alcohol

Online AA Resources

Drugs

Drugs

Addiction Research Foundation

Brixton Drug Project

Web of Addictions

Stress

Stress On-line Support

If you have any comments please send them to Margaret Simpson
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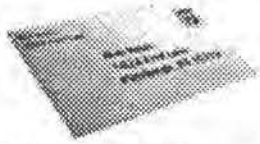
Who are the Counsellors?

If you have to leave a message, please try to give a contact phone number.
Alternatively, you can leave a note in the special letterbox outside the refectory, or e-mail us.

Margaret Simpson (full time counsellor)



M.Simpson@canterbury.ac.uk

(01227) 782233

Jill Wiffen (part time counsellor)

J.E.Wiffen@canterbury.ac.uk

(01227) 782686

If you have any comments please send them to Margaret Simpson
This page is supported by The TITLE Unit
Last Updated on 2nd June, 1997

Exam Stress: Top Ten Tips

 Its never too late to make a revision plan or timetable, and doing so will help you prioritise and feel more in control. But be realistic!

 Schedule regular breaks, and do take them. Make breaks longer as the day goes on. Remember, most people can only concentrate fully for about 45 minutes at a stretch.

 Don't try to revise for too long in one day, especially as exams draw nearer, and try to avoid revising late at night. Work on your most difficult subjects during your 'peak' periods, usually between 10 am and 12 noon, and 3 pm and 5 pm

 Try to get enough sleep - tiredness promotes anxiety. Spend some time unwinding before you go to bed.

 Pay attention to your diet, and take regular, aerobic exercise (if you enjoy it.)

 Avoid caffeine, which in large doses causes tension and anxiety. Remember,caffeine occurs in tea, cola drinks and chocolate as well as coffee. Drink plenty of water.

 Make sure you spend some time relaxing and having some fun.

 Consider revising with friends - splitting responsibility for obtaining photocopies and making revision notes can save a lot of time.

 Avoid people who are obviously panicking. It can be contagious! Try not to have post mortems on each exam, as this can increase your anxiety about later papers. Aim instead for a constructive appraisal of your time management, and so on.

 Finally, try to master some quick relaxation exercises. They can reduce your overall anxiety level and help you cope with any panicky feelings. Suggestions are available from the Student Counsellors and the Dean of Students' Office.

GOOD LUCK!

Practical steps to coping with Insomnia

Remember some degree of insomnia is normal at stressful times. Worry only if it becomes a pattern.

Cut down on caffeine.

Alcohol can make you fall asleep but you may wake 2 or 3 hours later from dehydration, and then its even more difficult to drop off. If you do drink in the evening, have plenty of water before going to bed.

Go to bed and get up at the same time each day. Try to establish a sleeping pattern, even at weekends for a time. Avoid catnaps during the day.

Keep bed for sleeping in - laze around somewhere else. Check that the temperature, ventilation, noise and light in your bedroom are at confortable levels.

When working in the evening try not to do anything difficult just before going to bed. Wind down during the evening rather than up.

When you go to bed, don't try to sleep. Even tell yourself not to go to sleep just yet!

Don't Panic. You cannot consciously will yourself to sleep.

Use helpful inner dialogue, eg. *I won't worry. I'll drop off to sleep soon. I can catch up on sleep tomorrow*, etc.

Try and relax. Practice clearing your mind of stressful thoughts. Help with this and some simple relaxation exercises are available from the Counselling Service. A relaxation tape or just some soothing music can be very helpful.

If after any hour, you are still awake, get up. Do something: drink some herbal tea, stroke the cat, listen to some music. Then if you start to feel sleepy, go back to bed and repeat the relaxation and mind-clearing.

Improving your concentration

 Prepare a timetable, start each study session on time.

 Your place for study should be a quiet room, free from distractions and interruptions.

 Ensure good posture, sit comfortably, with your chair and table at a good working height.

 Keep your workspace free from clutter and distractions.

 Work in a good light, to avoid tired eyes and check ventilation and room temperature before you start working.

 Undertake demanding tasks when you are at your best - usually early morning or early evening. Do more straightforward tasks later. It's better to get up earlier than stay up late.

 Clearly define the task you are going to work on and complete each task within the time allocated. Do not daydream.

 Be active, rather than passive; e.g. make notes and read critically.

 Review each task for a few minutes before moving on to the next.

 Put away your books and papers before starting work on the next task.

 Take frequent breaks of 5 or 10 minutes, longer as work goes on. As a minimum, take a few deep breaths, stand up, flex your arms, walk about.

 Try to get other anxieties out of the way before settling down to study.

Bulletin Board

Don't leave it to chance!

MANAGE YOUR **EXAM STRESS** *CREATIVELY*

We are holding an informal workshop designed to help you cope more effectively with exam stress

Wednesday 18 March
1.30 pm - 3.30 pm
North Lounge, Union Building

To book a place or obtain further information
ring the Counselling Service on **01227 782233**, or e-mail **M.Simpson@cant.ac.uk**

If you have any comments please send them to Margaret Simpson
This page is supported by The TITLE Unit
Last Updated on 13th November, 1997

Useful Newsgroups

Here are a list of newsgroups which could offer further advice, information and support

- alt.angst
- alt.recovery
- alt.recovery.addiction.gambling
- alt.recovery.panic-anxiety.self-help
- alt.support.big-folks
- alt.support.cancer
- alt.support.chronic-pain
- alt.support.diet
- alt.support.tinnitus

- misc.handicap
- misc.health.aids
- misc.health.alternative
- misc.health.arthritis
- misc.health.diabetes

- soc.men
- soc.women
- soc.women.lesbian-and-bi

- talk.rape

- uk.gay-lesbian-bi
- uk.people.deaf
- uk.people.disability
- uk.people.health

If you have any comments please send them to Margaret Simpson
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Last Updated on 2nd June, 1997

A18.3. Queen's University. Student Counselling Service

Student Counselling Service

The Student Counselling Service provides professional counselling services to students. Our staff is available to help with problems students may have concerning educational, career, or personal matters. As well, the service also offers programs to help students develop their skills as fully as possible. Click here for information about making appointments, cancellations, our no-show policy and our confidentiality policy.

Hours : 9:00am -4:30pm Monday to Friday except Wednesday 10:00am -4:30pm

Student Counselling offers a variety of services to students including:

- **Personal Counselling**
- **Career Exploration**
- **Learning Strategies and Resources**
- **Services for Students with Disabilities**
- **Workshops**
- **Aboriginal Counsellor**

For more information about any of our programs, please call **533-2893**, or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services), or e-mail PORTERV@post.queensu.ca

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Other Interesting Counselling Related Links

- The Keirsey Temperament Sorter
- Tips for Coping with Depression

THESIS BLUES?

Call the Student Counselling Service at 533-2893 to find out more information about the following groups:

GUNG HO is a group for GRADUATE STUDENTS who are looking for help with motivation and problem solving.

MOOD MASTER is a group for undergraduate and graduate students who are coping with mood problems.

GRAD LINK is a service linking graduate students for individual support.

[Queen's Home Page] | [Student Health Service]

Appointment Info and the Cancellation Policy

Appointments

Appointments are arranged on an individual basis. To book an appointment please telephone the Student Counselling Services at 545-2893, Monday-Friday, 9 a.m. to 4:30 p.m., or drop by the St. Lawrence Building (on the bottom floor next to Career Services). Some evening appointments are available.

Counselling Sessions

Sessions are booked on the half hour and last 45 minutes. To get the most benefit from your session, please arrive punctually. Our service provides up to a maximum of eight sessions per academic year. Should more sessions be necessary, you will be put on the counsellor's waiting list and can have up to twelve additional sessions per academic year when space becomes available.

Cancellation/No-Show Policy

If you need to cancel, we would appreciate as much advance notice as possible please call no later than 24 hours prior to your scheduled appointment. If the lines are busy or you are calling after regular working hours, please leave a message on our 24-hour confidential line (**545-2893**), and include the date and time of the appointment being cancelled 24 hours or more in advance.

Missed appointments result in loss of service to other students. Consequently, **$25.00 is charged for each appointment not cancelled in advance**, and any future appointments that are already booked may be deleted. You will be notified of the charge by mail; payment may be made at the Front Desk. The Registrar's Office will be notified of outstanding charges, and as with unpaid library fines, your marks will be withheld pending payment. Extenuating circumstances may be discussed with Mike Condra, the director.

Confidentiality Policy

All information disclosed within sessions is confidential and will not be revealed to anyone outside the Service without your written permission. When consultation with another professional within the Counselling Service is deemed appropriate, you will not be identified by name.

Because of the legal requirements regarding duty to report, the policy of confidentiality does not apply in the following circumstances:

1. If there is suspicion that a child or children (presently under the age of 16) has been or is being physically, sexually or emotionally abused.
2. If the client presents a serious danger of violence to others or is likely to harm himself or herself unless protective measures are taken.
3. If a client reveals that he/she has been sexually abused by a health care provider who is covered by the Regulated Health Professions Act (e.g., a physician or psychologist)

In any of these situations the counsellor is obliged to report to the appropriate authority.

Student Counselling Service
St. Lawrence Building
This page was updated June 25, 1996

Workshops and Specialized Programs

Student Counselling endeavours to be flexible to meet the needs of students. Every year the Service offers workshops on a variety of different topics. In order to meet students needs best the topics vary from year to year.

- Learning Skills
  Topics include: time management, organizational skills, effective note-taking, problem solving, exam and study strategies.
- Presentation Skills
  Teaches making effective presentations for beginners facilitating seminars or group presentations.
- Communication Skills
  Learn to be an effective, clear and assertive communicator.
- Gung Ho
  This is a support group for graduate student to help with motivation and problem solving.
- Learning Disabilities/Head Injuries/Attention Deficit Disorder Circle
  An informal discussion group for students with similar issues to share strategies for coping.
- Three Sisters Feast
  A weekly feast of Three Sisters Soup, Bannock and a social hour for native students and their friends. For more information call Robert Lovelace at 545-2893.

For more information about any of our programs, please call **545-2893**, or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services.)

[Back to Main Page] [Queen's Home Page]

Student Counselling Services
For information please call 545-2893.
This page was last updated June 25, 1996.
URL: http://www.queensu.ca/stserv/gr.htm

Personal Counselling

Distressing personal problems can seriously interfere with your academic performance and your emotional well-being. Emotional distress in the form of anxiety or depression, conflicts with or worries about family or friends, loneliness and alienation are experiences that many students go through.
Counsellors can help to put problems in perspective and make them seem more manageable. The opportunity to speak freely about your concerns, in a confidential and non-judgmental atmosphere, can be a source of great relief.
Student Counselling offers a number of different personal counselling options.

Crisis Counselling
Transition to University
Relationship concerns
Eating disorders/Body image concerns
Abuse survivor issues
Anxiety and stress relief techniques

For more information about any of our programs, please call **533-2893**,or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services.

[Back to Main Page] [Queen's Home Page]

Student Counselling Service
For information call 533-2893.
This page was last updated Sept 16,1998.
URL: http://www.queensu.ca/stserv/pc.htm

Crisis Counselling

If you are in distress and need immediate assistance, crisis counselling is available during office hours. Call 545-2893 or drop by Monday - Friday 9 a.m. to 4:30 p.m.

For more information about any of our programs, please call 545-2893,or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services.

[Back to Main Page] [Queen's Home Page]

Student Counselling Service
For information call 545-2893.
This page was last updated October 8,1996.
URL: http://www.queensu.ca/stserv/cc.htm

Learning Strategies and Resources

Student Counselling offers services, group sessions, workshops and individual counselling to help you improve your learning and study strategies.

Learning from texts: Reading Efficiently
Learning from lectures
Effective note taking
Math and science problem-solving strategies
Time-management and organizational skills
Learning disability assessment
Exam preperation and exam writing strategies

Learning Strategies Workshops Fall 1998

First Year Transition Workshops

Monday September 28, 9:30-10:30

Monday October 5, 9:30-1030

Tuesday September 29, 9:30-10:30

Tuesday October 6, 9:30-10:30

Learning Strategies Series

Tuesday October 6 (time), 1:30-2:30

Tuesday October 13 (lectures), 1:30-2:30

Tuesday October 20 (texts), 1:30-2:30

Library Research and Essay Writing

Thursday October 8, am (Stauffer Library)

Career Exploration

With the help of appropriate tests, explore your personal abilities and career interests; begin to map out academic majors and related career choices. Since many students are concerned about career direction and employment opportunities, the Counselling Service offers individual and group career counselling. Interest inventories and other tests may be used in exploring career directions.

For more information about any of our programs, please call **533-2893**, or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services.)

[Back to Main Page] [Queen's Home Page]

Student Counselling Service
For information call 533-2893.
This page was last updated June 25, 1996.
URL: http://www.queensu.ca/stserv/ce.htm

Services for Students with Disabilities

Student Counselling offers specialized services for students with learning and other disabilities which affect learning. Students with disabilities have a variety of different needs. To accommodate these differences, Student Counselling Service works in cooperation with the Disability Services and Student Health Service to meet the range of student needs.

What is a disability?

Persons with disabilities have a significant and persistent mobility, sensory, learning or other physical or mental health impairment which is permanent in nature;
AND experience functional restrictions or limitations of their ability to perform the range of life's activities;
AND may experience attitudinal and/or environmental barriers that hamper their full and self-directed participation.

How do I get a learning disabilities assessment?

In order to have a LD assessment you must first be referred (by a professor, Disability Services, Student Counselling Service, Student Health Service) or you may fill out an LD questionnaire at the front desk of Student Counselling. The test itself is a wide range of ability tests which help to highlight areas of strengths and weaknesses. Then there is a follow-up appointment to determine what can be done to best accommodate your abilities. There is a charge of $700.00 for these assessments. External funding may be available. Make sure to check with Disability Services.

Learning Disabled? Feeling over your head?

Join the learning disabilities support group! We will be meeting every second Monday from 12:30 p.m. to 1:30 p.m. at Student Counselling. Bring your own lunch, and get to know some of your peers. The sessions will be loosely structured around topics of interest to the group, possibly including: the Special Needs system at Queen's, learning strategies, using the libraries effectively, stress management, time management and organization, and relationships and communication skills. For more information call Allyson Harrison 545-2893.

Feeling Lost in Resources?

Library Services for students with special needs may be the answer. Stauffer Library has a full-time Coordinator for Special Readers' Services, who can help you arrange extended loan periods, alternate formats, reduced photocopy rates, use of adaptive technology labs and library instruction.
For more information contact Michele Chittenden at 545-2833, or email at chittend@stauffer.queensu.ca.
Special Readers' Service

For more information about any of our programs, please call **545-2893**, or drop by our office (on the ground floor of the St. Lawrence Building, beside Career Services.)

[Back to Main Page] [Queen's Home Page]

Aboriginal Counsellor

There is an Aboriginal Counsellor located at the Aboriginal Student Centre who is available for personal counselling and traditional training. The Aboriginal Student Centre is located at 72 Queen's Crescent, the little house in front of Student Health.

Students of Native Heritage and their friends are invited to a weekly **Feast of Three Sisters** Soup, Bannock and a Social hour on Thursday evenings from 5 p.m. to 7 p.m. For more information call Robert Lovelace or Lynn Manitowabi-Mianscum at **545-6970**.

A18.4. Auburn University. Student Counseling Services

Auburn University
Student Counseling Services

Empowering You
to Create a
Winning Future

(334) 844-5123
118 Foy Union
Auburn University, AL 36849

SCS Services

- Individual Counseling
- Group Counseling
- College Life Series
- Outreach Programming
- Consultation
- Crisis Management

Common Student Concerns

- Depression
- Self-Esteem
- Stress & Anxiety
- Eating Concerns
- Alcohol & Drugs

The Student Counseling Virtual Pamphlet Collection

CADRE

SCS Staff

Vern Russell, Ph.D., LPC, NCC
Clinical Member, AAMFT
Senior Coordinator

Doug Hankes, Ph.D.
Licensed Psychologist

David Hodge, M.S., LPC, NCC, MAC
Counselor

Liza Mueller, Ph.D., LPC, NCC
Counselor

For more information send email to: Vern Russell at russela@mail.auburn.edu

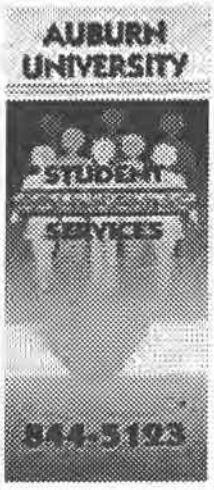
War Eagle

00047

Visitor Number

SCS

Individual Counseling



Location & Hours

Student Counseling Services (SCS) is located in 118 Foy Union. Regular hours are Monday through Friday, 8:00 A.M. to 5:00 P.M. Appointments can be arranged by calling 844-5123.

Eilgibility

SCS services are available to all AU students on a short-term basis. Students in need of a long term experience of 24 hr. coverage are referred to appropriate community resources. It is the goal of SCS to provide a safe, casual, yet professional environment where AU students will be comfortable in seeking counseling services for a whide variety of concerns. SCS offers individual counseling, based on a brief therapy model, to address the developmental concerns of AU students with an upward limit of ten (10) individual sessions per academic year. Typical problems include:

Depression	Anxiety
Relationship Issues	Sexual Orientation Issues
Grief Issues	Stress
Eating Disorders	Interpersonal Difficulties

The Counseling Experience

Entering counseling provides you the opportunity to explore your concerns within the context of a confidential relationship. There are many approaches to counseling and various formats in which it may occur. Within the variations, all counseling is a two-way process that works especially well when the client and counselor communicate openly.

Student Counseling Services (SCS) utilizes a brief-counseling model. One goal of this model is to empower you with the resources needed to make a positive change in your life. The focus is on solutions rather than problems. Our purpose is to co-create with you a clearly defined goal to work toward. Through the counseling interaction, homework assignments, and/or readings you can begin the process of self-discovery as you move toward the realization of your goals.

Confidentiality

Professional ethics and state laws consider the personal information discussed in counseling to be confidential. All information gathered in counseling, including the fact that you have come to SCS is held in strict confidence. No information will be released to university officials, faculty members, parents or outside agencies without written authorization from you. If you are receiving services from other units within the Student Success center, you will be asked to sign a release so information may be shared across units to develop the most appropriate intervention plan to ensure your academic success.

Limitations to confidentiality occur:

- in instances in which there is imminent danger of serious harm to you or others because of your actions
- when there is information of suspected child abuse

A licensed professional must reveal information to prevent these types of harm.

SCS

Welcome | Admissions | Calendar | OASIS | Directory | Search | Questions

SCS

Group Counseling

Each quarter Student Counseling Services offers several group experiences for AU students. There is ***$ NO CHARGE $*** for group sessions. There is no session limit on group participation.

Winter '98 Group Offerings

- ***Stress*** Management
- Women's Group
- Eating Concerns
- Adjusting to Campus Life
- Men's Group

Stress Management

An Experiential group in which students learn various approaches to stress management with extended time for practice and skill development. emphasis will be placed on learning self-hypnosis. This is is an open group. Feel free to attend. Topic areas will include:

- Understanding the ***STRESS*** Response
- MEDITATION
- VISUALIZATION
- SELF-HYPNOSIS

Women's Group

The Women's Group is open to all female students registered at AU. The group begins the first week of each quarter and lasts 10 weeks. Topics of interest discussed in former groups have included self-esteem, relationships, family, assertiveness, and values. Support and encouragement are the essence of the Women's Group and can often lead to the desired change in women. Members of the group are held to confidentiality within the group and are not permitted to discuss issues outside of the meeting time.

Eating Concerns

This group for students with eating concernsis a safe place to discover some of the factors that contribute to ongoing eating disorded behaviors. The focus of the group is process oriented whereby members are encouraged to explore personal issues such as "Who am I?" and "Why do I feel this

way?" The group is comprised of five to seven student members and two professional staff facilitators. Interested students are welcome to join the group during the first three weeks of the quarter.

Adjusting To Campus Life

This group provides an opportunity for participants to express concerns in a supportive environment and develop the coping skills needed to adjust to and be successful in the university environment.

Men's Group

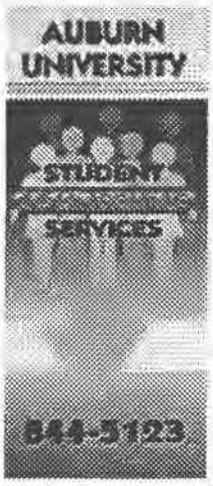
This group is open to all male students registered at AU. The group begins the first week of the quarter and lasts ten weeks. It is an opportunity for men to express themselves in a supportive environment. Readings on men's issues will be available as part of the experience.

SCS

Welcome | Admissions | Calendar | OASIS | Directory | Search | Questions

SCS

College Life Series



The College Life Series is an weekly offering on a topic of student interest. The purpose of the seminar series is to develop student awareness of issues often faced by the college age population.

Past program titles include:

Wellness Tools for a Lifetime
Date Rape: It Could Happen to You or Someone You Know
How to Study for Success in College
"He Said, She Said": Relationship Communication Skills
Time to Choose a Major and I Haven't a Clue
How Realistic is "Just Say No"?: Alcohol anf Risk Reduction
Obsessed by Food, Weight and Body Size: Do You Have an Eating Disorder?
Stressed Out? Learn How to Relax and Cope Better

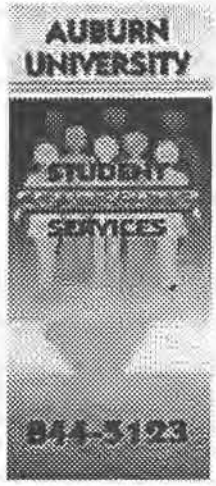
The College Life Series takes a break for the summer. We will be using the time to plan & develop our of fall programs. Information regarding program titles, dates & times will be posted in the future. Have a good summer!

Return to SCS Homepage

Welcome Admissions Calendar OASIS Directory Search Questions

SCS

Consultation



SCS staff is available to consult with faculty/staff regarding student mental health concerns. Staff can meet with an individual or group of faculty/staff to discuss particular concerns. SCS staff will, on request, schedule seminars to provide guidelines for recognizing mental health problems and making referrals for treatment.

SCS

Welcome | Admissions | Calendar | OASIS | Directory | Search | Questions

SCS

Crisis Management

SCS staff is available to respond to crisis situations involving AU students. Our first response is to assess the severity of the situation and make an appropriate intervention based on initial assessment. In emergency situations the AU Police will assist in the transport of the identified student to the emergency room of the East Alabama Medical Center. After hours emergencies are handled through the after hours emergency number of the East Alabama Mental Health Center.

SCS

Welcome | Admissions | Calendar | OASIS | Directory | Search | Questions

SCS

Outreach Programming

SCS staff and student members of **CADRE** are available to provide programming throughout the university community. Interested faculty/staff can request programs by calling the SCS office at 844-5123. Topics available for presentation in classrooms, residence halls, and fraternaties/sororities include presentations on stress management, eating disorders, responsible alcohol use, sexual assault, STD's, HIV disease, and communication skills.

SCS

Welcome | Admissions | Calendar | OASIS | Directory | Search | Questions

APPENDIX 19

SHS Alcohol Awareness week poster campaign

IS YOUR DRINKING AFFECTING YOUR STUDIES?

Try to answer these questions honestly.

1. Do you miss lectures due to drinking?
2. Is drinking making your personal life unhappy.
3. Do you drink because you are shy with other people.
4. Is drinking affecting you reputation.
5. Have you ever felt remorse after drinking.
6. Have you gotten into financial difficulties as a result of drinking.
7. Do you care less about your studies since drinking.
8. Has your commitment to your studies decreased since drinking.
9. Do you crave a drink at a definite time daily.
10. Do you drink to cope with your hangover the next morning.
11. Does drinking cause you to have difficulty in sleeping.
12. Do you drink to escape from worries or trouble.
13. Do you drink alone.
14. Have you ever had a complete loss of memory as a result of drinking/Forgot where ou have left your possesions.
15. Do you drink to build up your self-confidence.

If the answer to any of these is yes please consult a doctor or sister at the Student Health Service or a councellor at the Student Advice and Development Office.

IF YOU HAVE PROBLEM HELP IS AT HAND